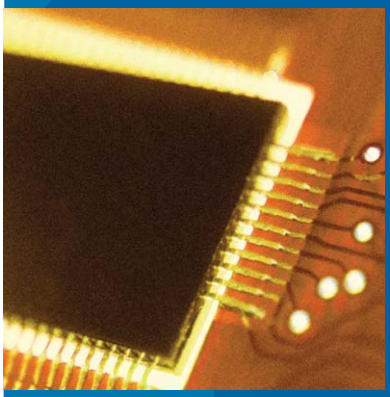
The Innovation Economy: Protecting The Talent Advantage



Bay Area Economic Profile

February 2006

Fifth in a Series

Bay Area Council

Bay Area Economic Forum

Association of Bay Area Governments

BAY AREA ECONOMIC FORUM

A Partnership of the Association of Bay Area Governments and the Bay Area Council

Bay Area Council

Founded in 1945, the Bay Area Council develops and drives regional public policy initiatives and researches critical infrastructure issues. Led by CEOs, the Bay Area Council presents a strong, united voice for hundreds of major employers throughout the Bay Area region who employ more than 490,000 workers, or one of every six private sector employees in the Bay Area.

Bay Area Economic Forum

The Bay Area Economic Forum is a public-private partnership established in 1988 by the Bay Area Council and the Association of Bay Area Governments (ABAG) to support the economic vitality and competitiveness of the region. Through focused economic and policy analyses and partnerships extending throughout the region, the forum addresses issues of critical concern to the competiveness, economic development, and quality of life of the Bay Area. The Board of Directors of the Bay Area Economic Forum comprises leaders in business, government, labor, higher education, and the community.

Association of Bay Area Governments

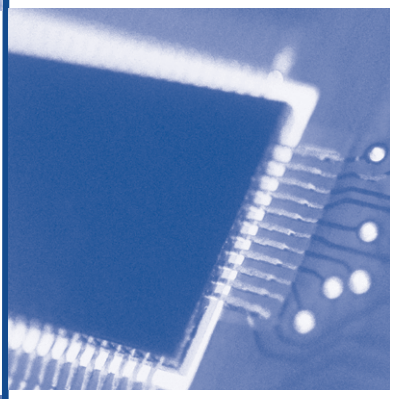
The Association of Bay Area Governments is the official comprehensive planning agency for the San Francisco Bay Area region. ABAG's mission is to strengthen cooperation and coordination among local governments. ABAG addresses social, environmental, and economic issues that transcend local borders, such as land use, growth management, housing, and economic competitiveness. All nine counties and 100 of the 101 cities within the Bay Area are voluntary members of ABAG, representing nearly all of the region's population. Currently, the ABAG approach includes research and analysis, education and outreach, and cost-effective member service programs.

McKinsey & Company

McKinsey & Company is a management consulting firm that helps leading corporations and organizations make distinctive, lasting, and substantial improvements in their performance. With 84 offices in 45 countries, McKinsey advises senior managers around the world on strategic, operational, organizational, technology and other important issues. McKinsey also advises government and regulatory agencies.

Copyright © 2006 Bay Area Economic Forum

The Innovation Economy: Protecting The Talent Advantage



Bay Area Economic Profile

February 2006

Fifth in a Series

Bay Area Council

Bay Area Economic Forum

Association of Bay Area Governments

BAY AREA ECONOMIC FORUM

A Partnership of the Association of Bay Area Governments and the Bay Area Council

The Innovation Economy: Protecting the Talent Advantage

This year, 2006, marks the tenth year of the Bay Area Economic Profile Series. First begun in 1996 as a collaboration of the Bay Area Economic Forum and McKinsey & Company, the report continues to benefit from strong contributions by teams from McKinsey and from a range of eminent advisers and partners. This year's edition therefore provides a special opportunity to assess the state of Bay Area's economy today, how it has changed through the ups and downs of the last decade, and how effectively the region's leadership has addressed the challenges the economy faces.

The report finds that the Bay Area remains one of the most inventive, competitive economies in the nation, based on a world-class R&D base, a diverse and creative workforce, and a spirit of risk taking and innovation. It is the world's premier knowledge-based economy, supported and driven by a proven capacity to innovate. We also find, however, that major challenges such as a rising cost of living have not been resolved, and are eroding the region's productivity compared to comparable metropolitan areas. Despite its many strengths, the Bay Area's continued leadership is at risk.

The Bay Area is home not only to business innovators, but also to civic innovators. Its rich array of civic and non-profit organizations and the region's deep reservoir of talent and entrepreneurship give us reason to be optimistic that the challenges the region faces today can be resolved. The need and vision are clear. What we need now to achieve it is political will.

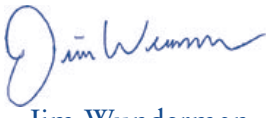
The Bay Area Economic Forum, the Bay Area Council, and the Association of Bay Area Governments are committed to working with their partners – business, economic development, civic and policy organizations throughout the region and the state – to assure that California and the Bay Area remain beacons of opportunity.

Lenny Mendonca
Chairman
Bay Area Economic Forum

Alex Mehran
Chairman
Bay Area Council

David Cortese
President
Association of Bay Area Governments

R. Sean Randolph
President & CEO
Bay Area Economic Forum



Jim Wunderman
President & CEO
Bay Area Council

Henry Gardner
Executive Director
Association of Bay Area Governments

Acknowledgements

This Economic Profile was prepared on a pro bono basis by McKinsey & Company, in cooperation with the Bay Area Economic Forum, the Bay Area Council and the Association of Bay Area Governments. It is the product of extensive analysis by the McKinsey team, leadership from the three partner organizations, and input from key partners.

Contributors from McKinsey & Company included Lenny Mendonca, director in McKinsey's San Francisco office and chairman of the McKinsey Global Institute; Diana Farrell, director of the McKinsey Global Institute, who oversaw the project; Aneta Key, who led the project team; Valerie Faillace, Paul Freiberger, Sigal Madem, Downey Noel, Vivien Singer, Philippe Sion, and Stephanie Soler. Sean Randolph directed the project for the Bay Area Economic Forum. John Grubb, Andrew Michael and Michael Cunningham from the Bay Area Council, and Janet McBride of ABAG, served on the project team.

Valuable advice and insight were also provided by a panel of leading economists including Paul Fassinger (Association of Bay Area Governments), Fred Furlong (Federal Reserve Bank of San Francisco), Jon Haveman (Public Policy Institute of California), Joe Hurd (Rosen Consulting), Howard Shatz (Public Policy Institute of California), Annalee Saxenian (University of California Berkeley), and Cynthia Kroll (University of California Berkeley).

The Innovation Economy: Protecting the Talent Advantage

Introduction

This report is the fifth in a series launched in 1996. At this 10-year juncture, we take stock of key developments in the Bay Area and how they are likely to evolve. The report examines the strengths of the region – its adaptive, innovation-driven economy, unrivaled talent base, and unique geographic and cultural intangibles – as well as its growing challenges in education, housing, and infrastructure.

Specifically, this report profiles the Bay Area's economic mix, state of education, level of productivity, cost of living – particularly housing – and infrastructure. It benchmarks the Bay Area to national averages and to 10 similar metropolitan regions in the U.S., including urban areas, high-tech clusters, and some up-and-coming cities.

Executive Summary

While the Bay Area has managed once again to transform itself and emerge prosperous from the recent high-tech boom and bust – outpacing its 2000 GDP by $17 billion in 4 years – it urgently needs more pathbreaking solutions and investment in education, housing, and infrastructure to secure the foundations for future success.

The Bay Area is exceptionally innovative and has continually reinvented itself. The region has a diverse economic mix, very high productivity, globally recognized expertise in knowledge-based endeavors, strong large businesses, dynamic small companies, and top-notch talent, not to mention an attractive physical setting and climate. With its agility and depth of knowledge, its core strengths of building and managing global businesses and creating new industries, products, and business models, the Bay Area has continuously remained at the leading edge.

Yet it must innovate in key areas to protect its talent base. The Bay Area economy is concentrated in knowledge-based occupations, and many companies locate here to tap its outstanding talent pool. The region's future depends on these highly-skilled workers. As the economy expands, however, talent vacancies loom as Baby Boomers retire, individuals relocate elsewhere in the nation, and foreign professionals move back home, especially to India and China as those countries offer more appealing career opportunities.

The Bay Area faces a dual challenge in filling this need. First, its education system must prepare all segments of the population to succeed in the knowledge economy. Second, the region must work more effectively to attract and retain talent, by addressing its high cost of living – especially housing – and strained infrastructure.

Education. In contrast to students admitted to the Bay Area's world-class universities, too many local K-12 public school students lack the skills to contribute to the knowledge-based economy.

Cost of living. Over the past 10 years, the continued escalation of the Bay Area's cost of living is striking. Because increases in the cost of living outpace increases in productivity, the Bay Area is falling behind in cost-adjusted productivity; paychecks are higher than elsewhere, but expenses are much higher.

Housing. Housing contributes most to the lofty cost of living. Local residents spend 48% of their income on housing, compared to 29% for the country as a whole. By federal standards, Bay Area housing is unaffordable for individuals of median income.

Infrastructure. On many fronts Bay Area public services have not kept pace with the demands of the economy and the growing population. Freeways are jammed, commutes are longer, the power supply is vulnerable to a hot summer, water systems could snap in a major earthquake, and the patchwork of governmental authorities could slow a coordinated response in the case of disaster.

Bay Area leaders and citizens can meet these challenges. Indeed, there is no shortage of efforts or vision. The constraints afflicting the Bay Area have grown over the past 10 years and the region cannot afford to wait another 10 years to resolve them. By acting today, policymakers can prevent these problems from widening, make the Bay Area more competitive, lessen the impact of a potential Katrina-scale disaster, and give today's residents and future generations a better quality of life. With sufficient political will – and with the Bay Area's deep reservoir of innovation and entrepreneurship – there is reason to be optimistic.

1. The Bay Area has continually transformed itself

The Bay Area has a highly productive, knowledge-based economy supported by an outstanding talent base and a spirit of creativity and innovation. It has repeatedly reinvented itself, and has emerged from the 2001 downturn with a broad-based, productive economy that remains one of the most innovative on earth.

The region is also one of the most appealing places to live in the United States. It has a mild climate, a splendid natural setting, and an informed, sophisticated culture. Its geographic hub, San Francisco, is one of the most beautiful and cosmopolitan cities in the world and a famed destination for travelers.

Adaptive economy. Over the past 10 years the Bay Area experienced a boom-and-bust cycle that mirrored nationwide trends, but had greater impact here because of the concentration in high-tech sectors. The local economy expanded faster than the national average in the late 1990s, growing from a 3% share of the US economy to 3.4%. It then fell back to its pre-bubble level, leaving its average growth rate over the last decade in line with that of the US as a whole.

The Bay Area's economic diversity helped its recovery, as growth in sectors such as financial services offset declines in electronic and computer manufacturing. In terms of GDP, the local economy has largely reverted to its pre-bubble structure. For example, while electronic and computer manufacturing ballooned from a 6.1% share in 1994 to a 10.3% share in 2000, it is now 6.9%. However, the gain in the information sector – from 4.5% of local GDP in 1994 to 6.6% in 2000 and 6.3% in 2004 – seems permanent, and shows not just the resilience of the Bay Area economy, but its agility in developing new industry sectors. (Exhibit 1)

The region has emerged from previous recessions in a strong position. In fact, it has a long history of reinventing and repositioning itself at the fore. From semiconductors to computers, software, the Internet, and life sciences – the Bay Area has repeatedly shifted its economic focus, but always managed to maintain its global prominence in the rising industries that change our world.

Knowledge-based economy. The Bay Area has a much higher concentration of knowledge-based occupations – especially professional and executive positions – than the nation as a whole. And its percentage of computer, math, and engineering jobs is twice the national average. Some 37% of its adult residents have at least a bachelor's degree, compared to 24% nationwide, and one in six has a graduate or professional

degree. Core skills include building and managing global businesses, innovating in products, services and business models, and creating new industries. (Exhibits 2-4)

EXHIBIT 1

THE BAY AREA ECONOMY HAS RETURNED TO ITS PRE-BUBBLE COMPOSITION

Percent of Bay Area GDP

100% =	1994 $209 billion	2000 $335 billion	2004 $352 billion	Change in share 1994-2004	1994-2004 CAGR Percent
Financial activities	21.0	19.3	22.5	1	6.0
Professional and business services	15.6	18.3	15.9	0	5.4
Wholesale and retail trade	12.4	10.9	11.1	-1	4.1
Government	11.0	8.1	9.6	-1	3.8
Computer and electronic product manufacturing	6.1	10.3	6.9	1	6.6
Other manufacturing	7.2	7.4	6.8	0	4.6
Education and health services	6.4	5.0	6.3	0	5.2
Information	4.5	6.6	6.3	2	8.8
Construction	3.4	4.1	4.3	1	7.9
Other*	12.3	9.9	10.3	-2	3.4

* Other includes other services, transportation and utilities, leisure and hospitality, natural resources and mining, non-BLS sectors

Source: Moody's Economy.com; McKinsey analysis

EXHIBIT 2

THE BAY AREA HAS A HIGHER CONCENTRATION OF KNOWLEDGE-BASED OCCUPATIONS…

Percent of employment

Occupational group	Bay area* 2004	1999	U.S. 2004	1999
Professional**	24.8	23.0	22.1	20.5
Executive***	11.9	11.4	8.8	9.8
Professional & executives	36.7	34.4	30.9	30.3
Sales****	10.5	9.8	10.6	10.2
Admin. support	17.2	18.0	17.5	17.7
Knowledge workers	64.4	62.2	59.0	58.2
Blue collar	23.4	25.2	27.6	29.5
Service	12.2	12.6	13.4	12.3
Total	100.0	100.0	100.0	100.0

* Bay Area numbers include the 9-county Bay Area and the county of San Benito. San Benito accounts for only 0.8% of the overall Bay Area population

** Professional occupations: computer and math, architecture and engineering, life, physical and social sciences, community and social services, legal, education, arts, design, entertainment, sports and media, healthcare occupations

*** Executive: management, business and financial operations occupations

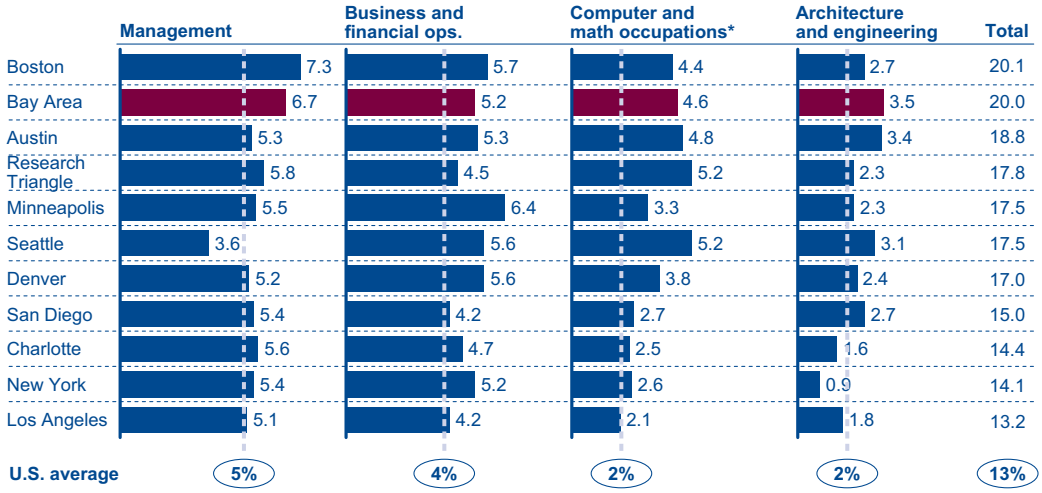
**** Sales: managers of retail and non-retail stores

Source: Bureau of Labor Statistics; McKinsey analysis

EXHIBIT 3

…ESPECIALLY EVIDENT IN COMPUTER, MATH AND ENGINEERING OCCUPATIONS

Employment share for selected occupational groups, 2004
Percent of total jobs

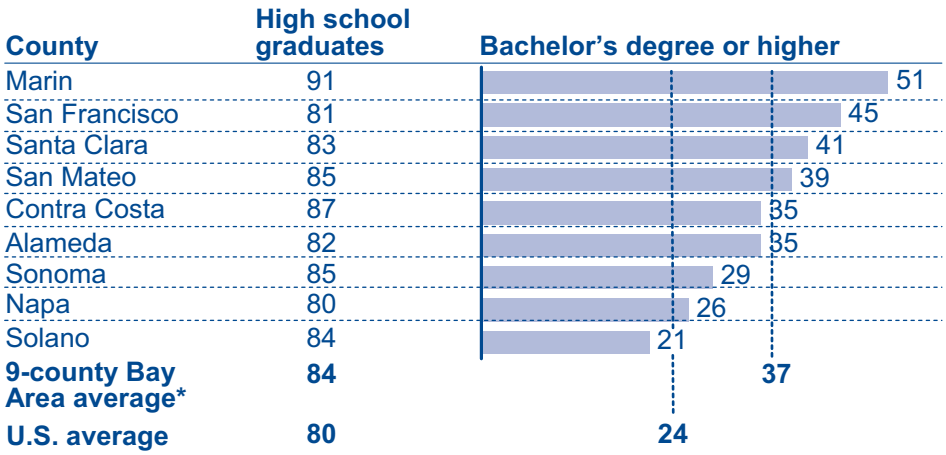


* Includes computer scientists, programmers, software engineers, support specialists, systems analysts, mathematicians, and statisticians
Source: Bureau of Labor Statistics

EXHIBIT 4

THE BAY AREA IS MORE EDUCATED THAN THE U.S. AVERAGE, WITH DIFFERENCES ACROSS COUNTIES

Percent of adult population, 2000



* Weighted average by population
Source: U.S. Census Bureau; McKinsey analysis

EXHIBIT 5

THE BAY AREA IS INCREASINGLY CONCENTRATED IN KNOWLEDGE-INTENSIVE INDUSTRIES

Percent of employment

Sector	1994 Share of Bay Area employment	1994 Difference with U.S. share*	2004 Share of Bay Area employment	2004 Difference with U.S. share*	Gain/loss of share relative to U.S.
Other manufacturing	7.7	1.5	6.2	-2.9	-4.4
Computer and Electronic product manufacturing	6.0	1.3	4.6	3.3	2.0
Government	15.0	0.8	14.2	-1.5	-2.3
Wholesale and retail trade	14.1	0.3	13.8	-1.3	-1.6
Financial activities	6.5	0.2	6.4	0.5	0.3
Information	3.0	-0.5	3.5	1.2	1.7
Professional and business services	15.0	-1.0	16.0	4.0	5.0
Education and health services	9.9	-1.0	10.9	-1.4	-0.4
Construction	3.6	-1.8	5.5	0.4	2.3

* A positive figure indicates that the Bay Area has a greater degree of concentration in the industry than does the U.S. overall

Source: Bureau of Labor Statistics; Moody's Economy.com; McKinsey analysis

EXHIBIT 6

CALIFORNIA LEADS IN TERMS OF RESEARCH AND DEVELOPMENT

Percent of U.S. total

	Population 2003	Number of doctorate scientists 2001	Number of doctorate engineers, 2001	Total federal R&D expenditures 2002	Total industry R&D expenditures 2002	Total universities R&D expenditures 2002	Number of SBIR* awards 1999-2002	Patents** issued to state residents 2002
California	12.0	13	19	11	22	13	20	22
Texas	7.5	5	8	7	6	7	4	7
New York	6.5	8	6	7	5	8	4	7
Massachusetts	2.2	5	4	3	6	5	14	4
U.S. total	294,688	542,940	112,760	$1,896 B	$182 B	$36 B	19,383	86,971

* SBIR awards = small business innovation research awards granted by the National Institute of Standards and Technology, a non-regulatory agency within the U.S. Commerce Department

** Utility patents issued by the U.S. Patent & Trademark office "for the invention of a new and useful process, machine, manufacture, or composition of matter, or a new and useful improvement thereof…"; cover approximately 90% of the patent documents issued in recent years

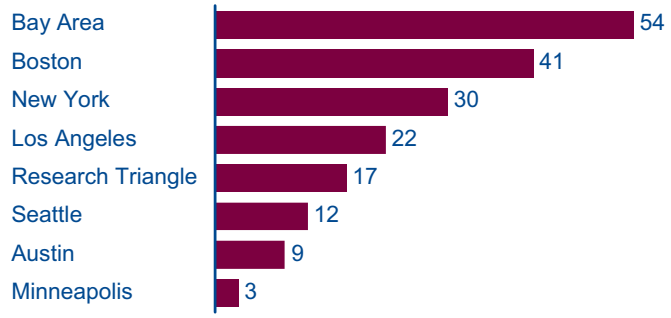
Source: National Science Foundation; U.S. Patent & Trademark Office; McKinsey analysis

Further, compared to the US economy, the Bay Area is becoming more concentrated in knowledge-intensive industries. For example, the share of local employment in computer and electronic product manufacturing increasingly exceeds the US average, while the share in traditional manufacturing is falling behind. Employment share in professional and business services and in information technology is also much larger in the Bay Area than in the US as a whole. (Exhibit 5)

EXHIBIT 7

THE BAY AREA IS HOME TO THE GREATEST NUMBER OF TOP 10 GRADUATE PROGRAMS

Number of business, law, medical and engineering graduate programs ranked top 10 nationally*



* Includes both overall school ranking (4 in total) and ranking for specialty programs (10 in business, 9 in law, 8 in medicine, 12 in engineering). Total: 43 x 10 = 430

Source: U.S. News and World Report 2006; McKinsey analysis

Innovation hotbed. The Bay Area has world-class research facilities and the venture capital to fund risky but potentially breakthrough ideas. Among the research centers that dot the region are federal institutions (like Lawrence Berkeley National Lab, Lawrence Livermore National Lab, NASA Ames Research Center, and Sandia National Labs), new state facilities (e.g., the California Institute of Regenerative Medicine for stem cell research, QB3, and CITRIS), renowned universities like Stanford, UC Berkeley, UC San Francisco, UC Davis, and UC Santa Cruz, and many private laboratories operating in advanced science fields.

Much of the relevant data is only available at the state level, but it shows that California leads the nation in the number of doctorate-level scientists and engineers, small business innovation awards, patents, and federal, academic and industry R&D expenditure. The Bay Area contributes to this leadership. Several local universities rank in the top 20 in the US as recipients of R&D funding from the National Science Foundation. The Bay Area is also home to the largest number of Top 10-ranked graduate programs among comparable regions. (Exhibits 6, 7)

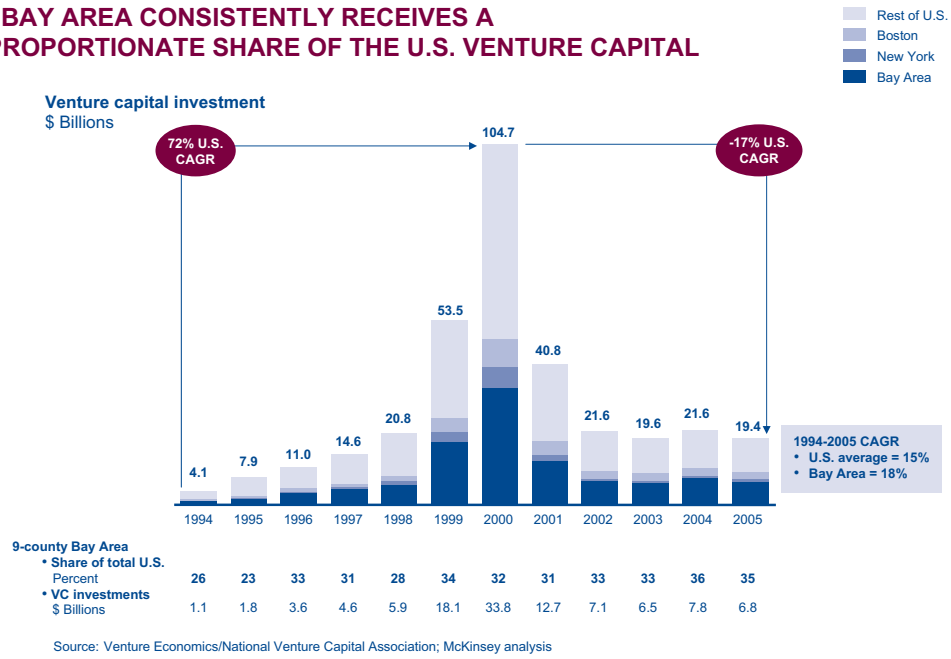
Another key measure of innovation is the number of patents per 10,000 employees. The San Francisco-Oakland-Fremont metropolitan area had 16.6 for 2002, more than double the national average (7.7). Even more strikingly, the San Jose-Sunnyvale-Santa Clara metropolitan area had 72.8 patents per 10,000, one of the highest rates in the country. Overall, these areas earned nearly 20,000 patents between 1998 and 2002.[1]

The Bay Area is a rich pool for venture capitalists because of this fertility in ideas, its expertise at developing them, and its web of entrepreneurial and management talent. The region consumes a disproportionate share of the country's venture capital – both in absolute terms and as percentage of local GDP. In fact, the Bay Area receives 35 percent of all US venture capital. No other region comes close. (Exhibit 8)

1. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School.

EXHIBIT 8

THE BAY AREA CONSISTENTLY RECEIVES A DISPROPORTIONATE SHARE OF THE U.S. VENTURE CAPITAL

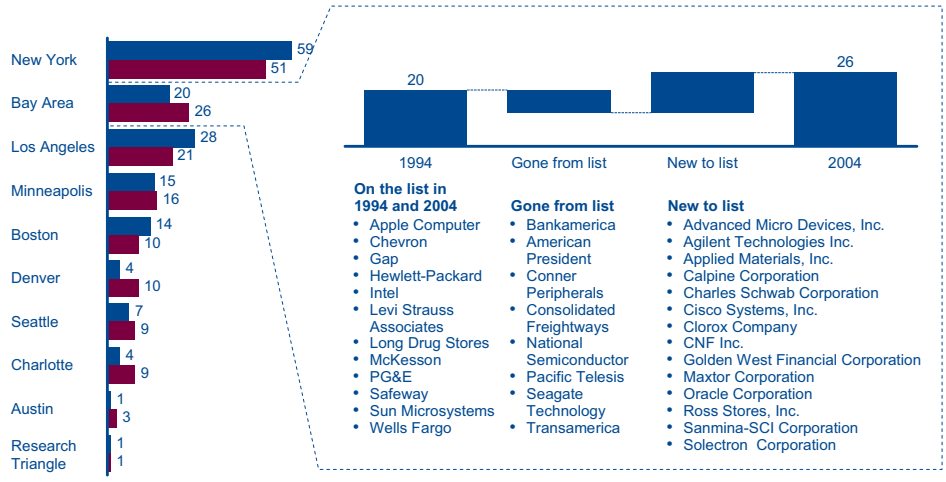


Source: Venture Economics/National Venture Capital Association; McKinsey analysis

EXHIBIT 9

THE BAY AREA HAS INCREASED ITS SHARE OF FORTUNE 500 COMPANIES

Number of Fortune 500* companies



* Top 500 of Fortune 1000 U.S. companies
Source: Fortune Magazine; McKinsey analysis

Bay Area companies also tend to gain venture capital earlier than firms elsewhere. The first round of financing usually comes 11.6 months after launch, compared to 16.6 months in Boston and the U.S. as a whole. In Silicon Valley, this swift access to venture capital is evident in every high-tech sector, from consumer and business services and electronics (each gaining funds 50% faster than the U.S. average) to software.[2] As a result, local companies can obtain capital and move ideas and products into the marketplace faster than elsewhere.

Business base. The Bay Area is home to over 155,000 businesses, including nearly 500 foreign companies. There is a notable concentration of large companies – 3.9% of the companies headquartered in the region have more than 500 employees, as opposed to the 0.3% US average.

The share of major US companies based in the Bay Area has increased over the past 10 years. Currently 26 of the largest 500 companies in the country are headquartered here, with combined 2004 sales of $574 billion and in many cases global reach. On average, these companies have grown faster than the stock market as a whole, in both sales and market value. (Exhibit 9)

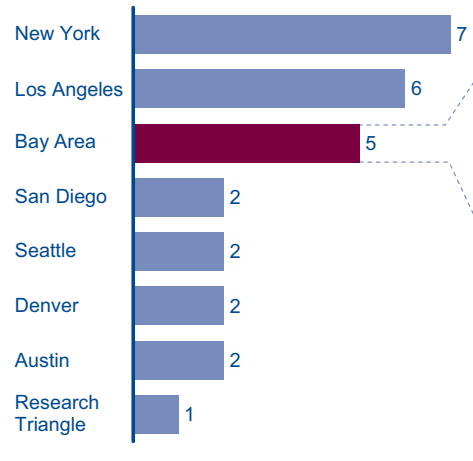
The Bay Area is also home to many of the nation's fastest-growing private companies. For example, 25 firms on Inc. magazine's "Inc. 500: America's fastest-growing private companies" list are based in the Bay Area. Further, according to 2004 estimates, more than half (55%) of the 1,457 biotech companies in the US are located in the Bay Area. As for nanotechnology, the Bay Area hosts 7% of the world's nanotech corporations, behind only Germany (9%) and ahead of Japan (5%), Canada, Switzerland and the U.K. (each 4%). (Exhibit 10)

EXHIBIT 10

THE BAY AREA HAS HIGH CONCENTRATION OF FAST-GROWING PRIVATE COMPANIES

Share of the Inc. 500: America's fastest growing private companies

Percent



- eSilicon
- Evolve manufacturing
- NexTag
- Wage Works
- Net Suite
- Zantaz
- EmailLabs
- 2 Wire
- EVault
- Next Web
- Star Mine
- Mighty Leaf Tea
- Shutterfly
- Dynarand
- Many Frances Accessories
- Headsets.com
- Epocrates
- Signature Wines
- Legg Inc.
- Taleo
- Broadlane
- Loop Net
- Calypso Technology
- Payment One
- Vitesse Learning

Source: Inc. magazine, "The Inc. 500: America's fastest-growing private companies", 2005; McKinsey analysis

2. Junfu Zhang, "High-Tech Start-Ups and Industry Dynamics in Silicon Valley", Public Policy Institute of California, 2003.

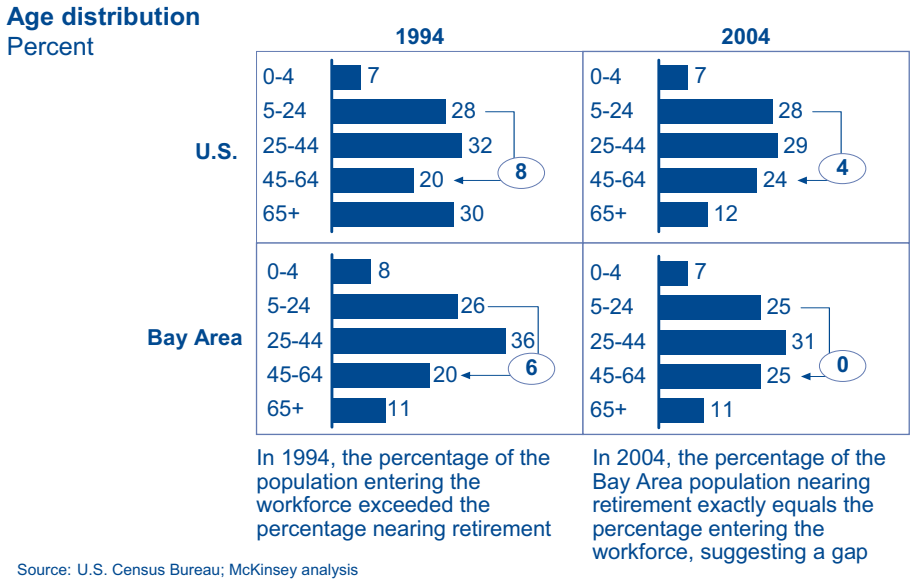
2. Persistent trends threaten to erode the talent base

The Bay Area's need to attract and produce highly-skilled workers is increasing, due to a growing economy, the retirement of Baby Boomers from the labor force, the movement of people to other locations in the country, and the greater numbers of foreign professionals returning home.

The Baby Boomer factor. The Bay Area may feel the impact of the aging Baby Boomer generation more severely than other regions. The population nearing retirement (ages 45-64) exactly equals the population poised to enter the workforce (ages 5-25). As a result, the Bay Area will continue to need a fresh inflow of workers to fill both existing and newly created jobs. The Bay Area economy has always relied on talent from other places, and in coming years it will have to do so more. The quality of local K-12 education will also increase in importance as the need for replacement talent grows. (Exhibit 11)

EXHIBIT 11

THE BAY AREA MAY FEEL THE IMPACT OF RETIRING BABY BOOMERS MORE SEVERELY THAN THE U.S. OVERALL



Source: U.S. Census Bureau; McKinsey analysis

Role of foreign talent. The Bay Area is a talent magnet, drawing creative, educated people from all over the planet. Local universities attract top global minds – both students and researchers – many of whom remain here to enrich the local economy. However, today more and more foreign-born scientists and engineers are studying here but returning to their home countries to build careers. As entrepreneurial opportunities abroad increase, particularly in China and India, fewer immigrants may choose to face the Bay Area's high cost of living. If the region is to keep these

valuable individuals, it must remain an attractive place both to live and to build a career.

The Bay Area will continue to excel in talent if: 1) Its schools equip its youth with the skills to participate in the economy, and/or 2) It keeps attracting highly-skilled workers from throughout the nation and other countries. Are the public schools preparing Bay Area youth to enter a workforce where higher education or specialized training is increasingly the passkey? And, will the Bay Area continue to appeal to talent, both retaining residents and attracting newcomers?

2.1. The K-12 education system must equip students for the knowledge-based economy

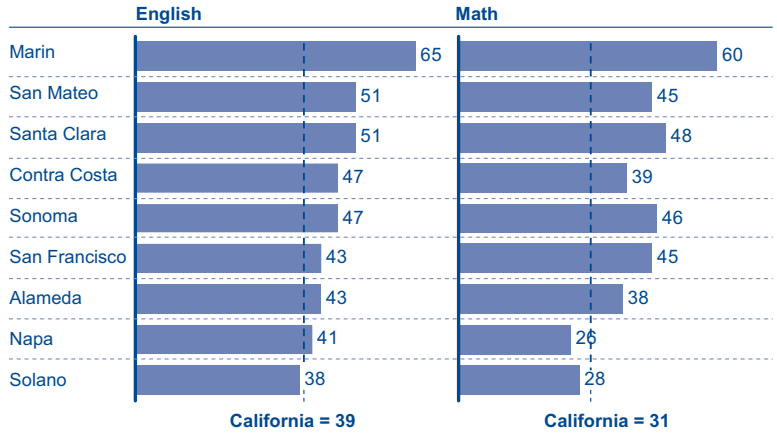
Despite the outstanding quality of universities and the high education level of Bay Area residents, students in California's K-12 public schools severely underperform those in other states. In the end, many schools are failing to ensure basic literacy and math skills. English is a second language for a growing number of children, and the schools must take extra steps to educate them.

Basic proficiency. The picture regarding the Bay Area's public schools is troubling. On a positive note, a higher percentage of Bay Area eighth graders achieve proficiency in math and English than eighth graders in California generally. Unfortunately, the percentage of California eighth graders achieving proficiency in the basic skills of math, reading and science lags that of eighth graders in all of the states where our comparable cities are located. (Note that since each state designs its own test, proficiency data are not directly comparable between states.) (Exhibits 12, 13)

EXHIBIT 12

OVERALL, BAY AREA STUDENTS OUTPERFORM THE STATE AVERAGE ON EIGHTH GRADE PROFICIENCY TESTS

STAR Achievement, 2005
Percent of students testing proficient or above

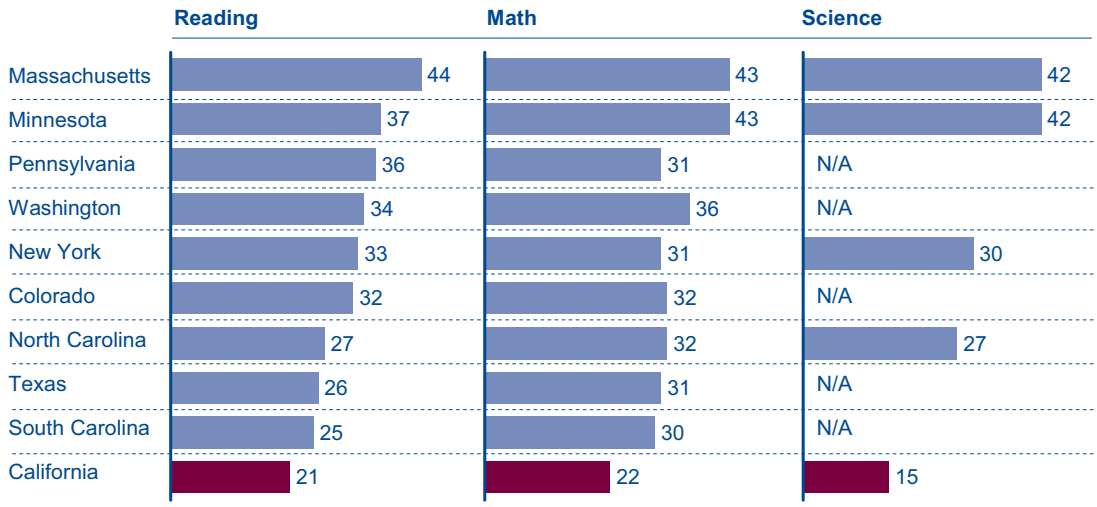


Source: California Department of Education; McKinsey analysis

EXHIBIT 13

HOWEVER, CALIFORNIA LAGS COMPARABLE STATES IN EDUCATION PROFICIENCY

Percent of 8th-grade students at or above the proficient level for public schools, 2005

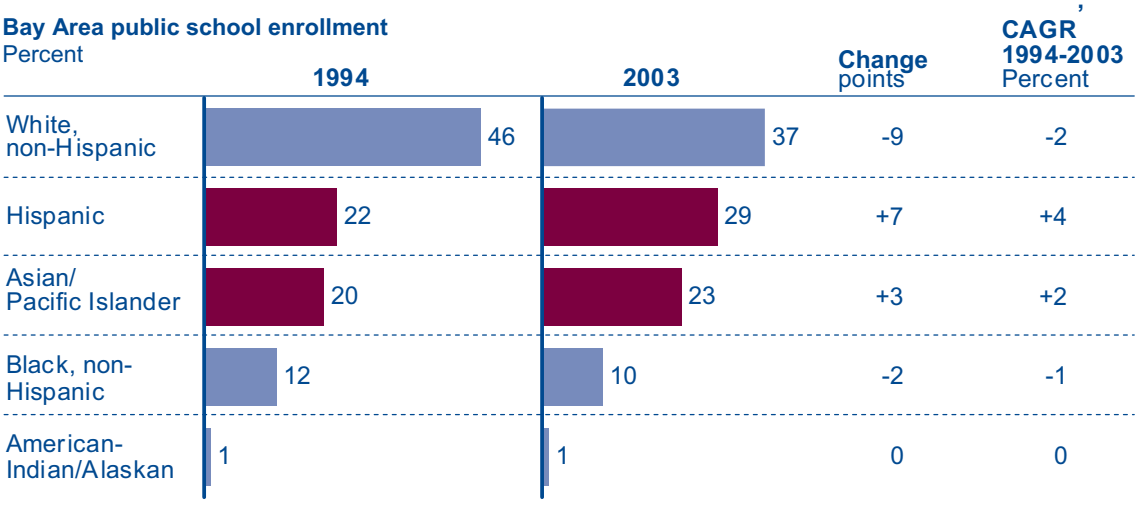


Source: National Assessment of Educational Progress

EXHIBIT 14

HISPANICS AND ASIANS CONSTITUTE A GREATER PERCENTAGE OF PUBLIC SCHOOL ENROLLMENT THAN THEY DID A DECADE AGO

Bay Area public school enrollment
Percent



Source: National Center for Education Statistics

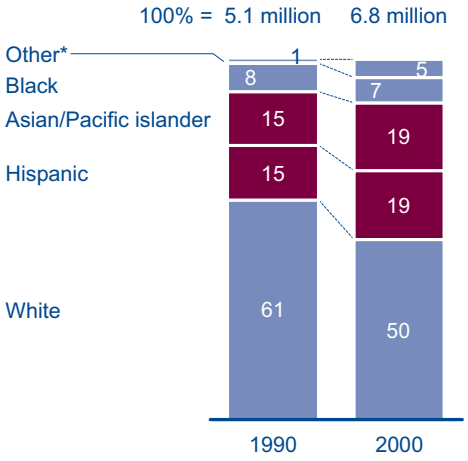
Demographic trends. From 1990 to 2000, both Asians and Hispanics increased their share of the Bay Area population overall and of the school population as well. From 1994 to 2003, the Hispanic student sub-population in the Bay Area grew from 22% to 29% of the total and the Asian sub-population grew from 20% to 23%. Performance data suggest that Bay Area public schools are not meeting the community's need to educate all ethnic sub-populations adequately. Asian and non-Hispanic whites score higher than their peers in English and math, and a much greater percentage of Asians[3] and non-Hispanic whites enroll in higher levels of math in the eighth grade. To ensure that currently underperforming students can join the knowledge workforce, the schools must help those students achieve proficiency in math, reading and science early in their education. (Exhibits 14-16)

EXHIBIT 15

ASIAN AND HISPANIC POPULATIONS ARE GROWING IN THE BAY AREA

Bay Area population by ethnicity

Percent



* The methodology was changed in 2000 to include a category called "two or more races" distorting direct comparison between the two data sets. Here 2000 data includes American-Indian, Alaskan native, "other", 2 or more races; 1990 data includes American Indian, Eskimo, Aleut or "other"

Source: U.S. Census Bureau; McKinsey analysis

EXHIBIT 16

ASIANS OUTPERFORM OTHER ETHNIC GROUPS ON PROFICIENCY TESTS

STAR achievement, 2005

Percent of Bay Area 8th graders scoring proficient or above

	Basic-level classes			*Advanced-level classes*			
	Language arts	General math	Percent of subgroup taking test	Algebra I	Percent of subgroup taking test	Geometry	Percent of subgroup taking test
Asian*	64	54	34	74	57	93	9
White, non-Hispanic	64	45	51	62	46	90	3
Filipino	46	36	52	41	45	73	3
American-Indian/ Alaska native	41	31	66	37	32	n/a	0
Pacific Islander	28	22	57	30	41	0	2
Hispanic/Latino	24	19	68	24	31	71	1
African-American	21	13	66	15	33	58	1

* There is significant variation among the different Asian ethnicities

Source: California Department of Education

3 The data on Asians mask important ethnic variations.

2.2. The high cost of living offsets high productivity and incomes

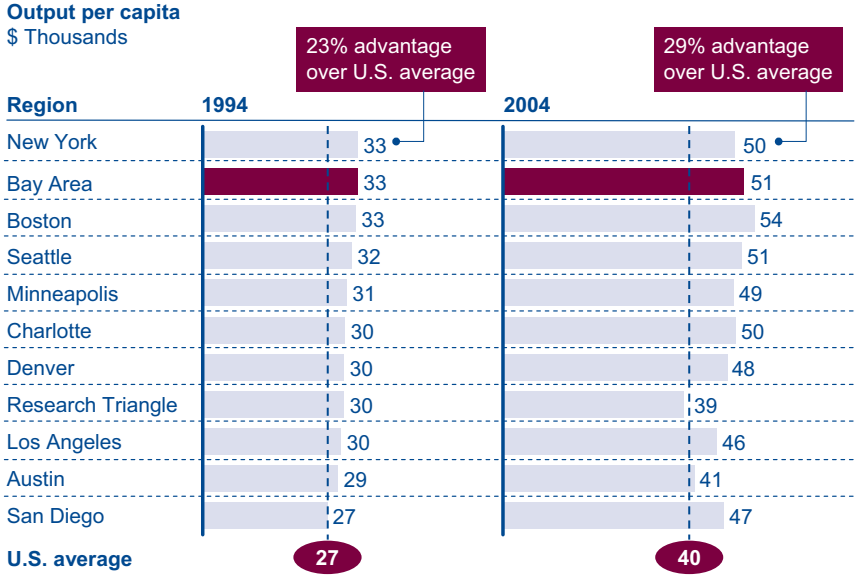
Though the Bay Area is among the most productive and appealing regions in the US, its high cost of living increasingly offsets its advantages. The average paycheck is larger than in comparable regions, but doesn't go as far. Many residents tolerate the high cost of living to enjoy the Bay Area's spectacular natural environment and richly cosmopolitan society. However, as the cost premium rises, the workers who keep the local economy thriving may reassess their personal choice to live here.

Productivity. The rate at which an economy increases its productivity partly determines how fast it can improve its standard of living. Productivity growth lets businesses make more and/or higher-quality goods at lower cost. Firms can then distribute the resulting surplus to customers (as lower prices), to workers (as higher salaries) and to owners (as higher profits) without causing inflation. A higher standard of living further stimulates the economy by increasing demand.

In the past ten years, productivity – that is output per capita – in the nine-county Bay Area has steadily grown and outpaced the US average. Further, this increase has come through improvement in employee productivity, and not through growth in the share of the population that is working. The Bay Area consistently leads comparable regions in output per capita and its advantage over the US average has increased from 23% in 1994 to 29% in 2004. In fact, for most of the past 10 years, the Bay Area has been the top performer in productivity (although Boston has surpassed the Bay Area since 2001). (Exhibit 17)

EXHIBIT 17

THE BAY AREA'S PRODUCTIVITY EXCEEDS U.S. AVERAGE AND THAT OF MOST OTHER COMPARABLE REGIONS



Source: Moody's Economy.com; U.S. Census; McKinsey analysis

All Bay Area counties but Napa and Solano exceed the US average in productivity, and GDP per capita in San Francisco is over twice the national level. The differences among counties stem from varying economic mixes, the distribution of the working population, and commuting patterns.

Productivity adjusted for cost of living. Quality of life and productivity are two elements of standard of living. Another is cost of living – and a high and accelerating cost of living offsets the Bay Area's high productivity.

While the relative productivity of the Bay Area peaked in 2000 and then corrected, it remains high, at 129% of the US average. However, the relative cost of living has kept growing over the years and is currently 141% of US average. As a result, the relative cost-adjusted productivity of the region has slipped below the national average, and in fact, below all of the benchmarking regions except San Diego. (Exhibit 18)

Relative income after cost of living adjustment. Though salaries in the Bay Area are higher than in comparable regions and the US overall, expenses are higher still. In fact, the Bay Area has the questionable honor of being the nation's most expensive place to live. If a professional earning $70,000 in the Bay Area – the median household income in the region – accepted an equivalent job elsewhere in the country, he or she would likely take a cut in salary. That job in Charlotte, for instance, would pay $59,200. However, on a purely monetary basis, the lower household expenses there would more than offset the lost wages. In fact, if a household's living expenses in the Bay Area were $70,000, the equivalent cost in Charlotte would be $36,900, leaving the family with a surplus (income less costs) of $22,300. (Exhibits 19-21)

Of course, money isn't everything. Most Bay Area residents are clearly willing to trade a higher budget surplus for factors they believe enhance their quality of life. Residents savor the region's deeper virtues as well: its architecture, diverse neighborhoods, outstanding cuisine, vibrant culture, wine country and array of recreational opportunities. These features are a particular draw for young, mobile knowledge economy workers.

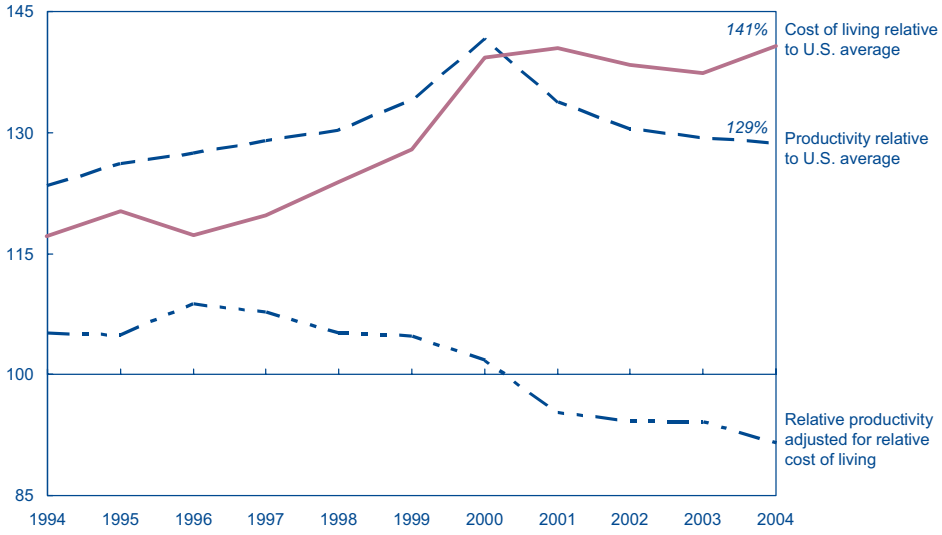
Wealth effect. Reliance on income is somewhat misleading, for it does not capture the impact of local residents' wealth. The Bay Area median income is 1.6 times higher than the US median[4] but the region's median household net wealth of $195,000 is 3.9 times that of the US median.[5] Those with the resources to afford it may be less sensitive to the high cost of living. Nonetheless, the region risks losing individuals who cannot as easily afford the high cost of living. People such as teachers, fire fighters, and nurses must often move to the outskirts of the region in search of affordable housing, or even out of the region entirely. The knowledge economy workers, who are highly mobile and have job opportunities elsewhere, are also affected and may choose to leave or avoid the Bay Area altogether.

4. Median income for the Bay Area in 2004 was $70 thousand, and for the US - $44 thousand; Moody's Economy.com.
5. Calculations from the Survey of Income Programs and Participation by Jon Haveman and Ethan Jennings at the Public Policy Institute of California; 2003 data.

EXHIBIT 18

THE BAY AREA'S COST OF LIVING INDEX HAS SURPASSED ITS PRODUCTIVITY INDEX

Index to 100 for U.S. average



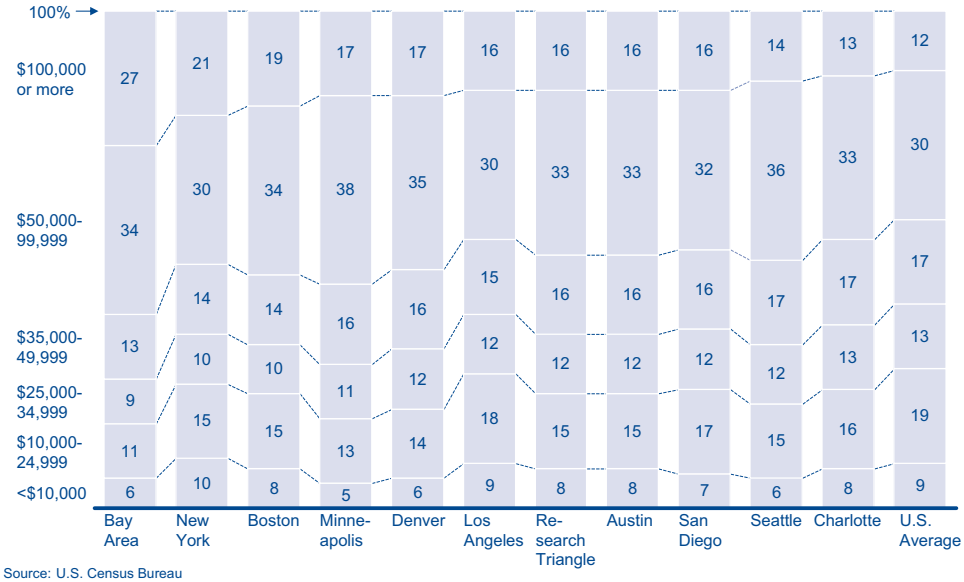
Source: Moody's Economy.com; McKinsey analysis

EXHIBIT 19

THE BAY AREA INCOMES ARE HIGHER THAN THOSE IN COMPARABLE REGIONS

Income distribution – 2000

Percent of population

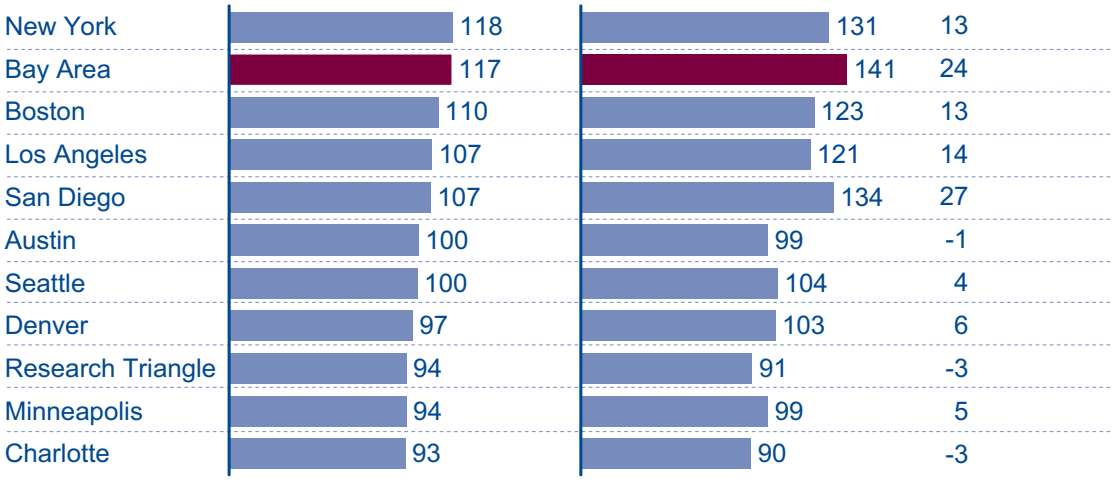


Source: U.S. Census Bureau

EXHIBIT 20

THE BAY AREA HAS SURPASSED THE NEW YORK METROPOLITAN REGION AS THE MOST EXPENSIVE PLACE TO LIVE

Cost of living* indexed to 100 for U.S. average



* Cost of living defined as weighted average of food and retail expenditures, housing, utilities, insurance, and transportation costs; excludes taxes

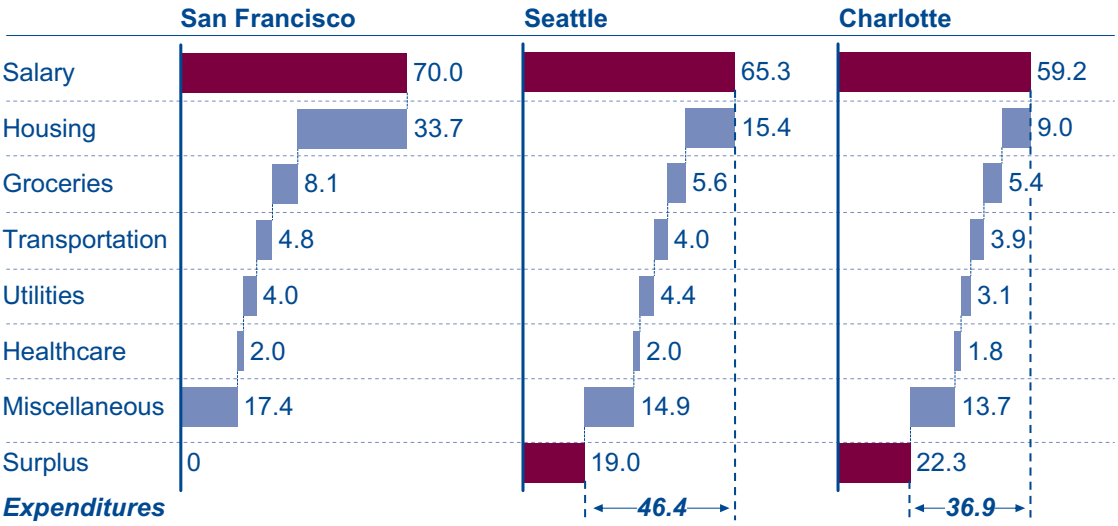
Source: Moody's Economy.com; McKinsey analysis

EXHIBIT 21

THE BAY AREA'S HIGH COSTS OUTWEIGH HIGH INCOMES

Example for comparable professional salary and cost of living*

$ Thousands



* Expenditures based on average professional household, excludes taxes

Source: Salary.com; ACCRA cost of living index; McKinsey analysis

Cost of doing business. Entrepreneurs and executives are a crucial form of talent, and they must cope with a related challenge: the cost of doing business. The Bay Area has the highest cost of doing business in the nation. While local companies spend approximately the US average on taxes and direct labor costs (in terms of wages and salaries per dollar of output), they pay more in benefits and other costs, twice the average energy costs, and a 32 percent premium for rent. In addition, though recent reforms have lowered workers compensation premiums, they are still more than twice the national average. California employers spend $6.08 per $100 in payroll, compared to $2.70 for the U.S. as a whole.

2.3. The cost of housing is unaffordable for many

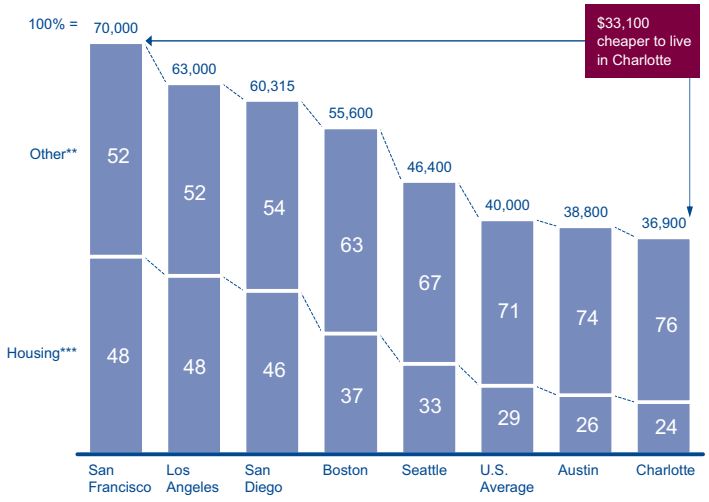
Though most everyday purchases in the Bay Area – from energy to groceries – come at a premium, housing is the key factor in the high cost of living. Housing costs 39% more than the US average, and local residents spend almost half (48%) of their income on housing, compared to 29% for the country as a whole. Notably, the three California metropolitan regions in our benchmarking set – the Bay Area, Los Angeles, and San Diego – have shown the highest jumps in relative cost of living over the past decade, reflecting the rise in local real estate markets across the state. (Exhibits 20, 22)

EXHIBIT 22

HOUSING IS THE PRIMARY DRIVER OF THE BAY AREA'S HIGH COST OF LIVING

Comparable expenditures*

Dollars, percent



* Based on average annual expenditures for professional household

** Other includes groceries, utilities, transportation, health, and miscellaneous

*** Assumes 19% renters of 950 sq. ft., 2 bedroom apartments, 81% owners of 2,400 sq. ft. homes

Source: ACCRA cost of living index; McKinsey analysis

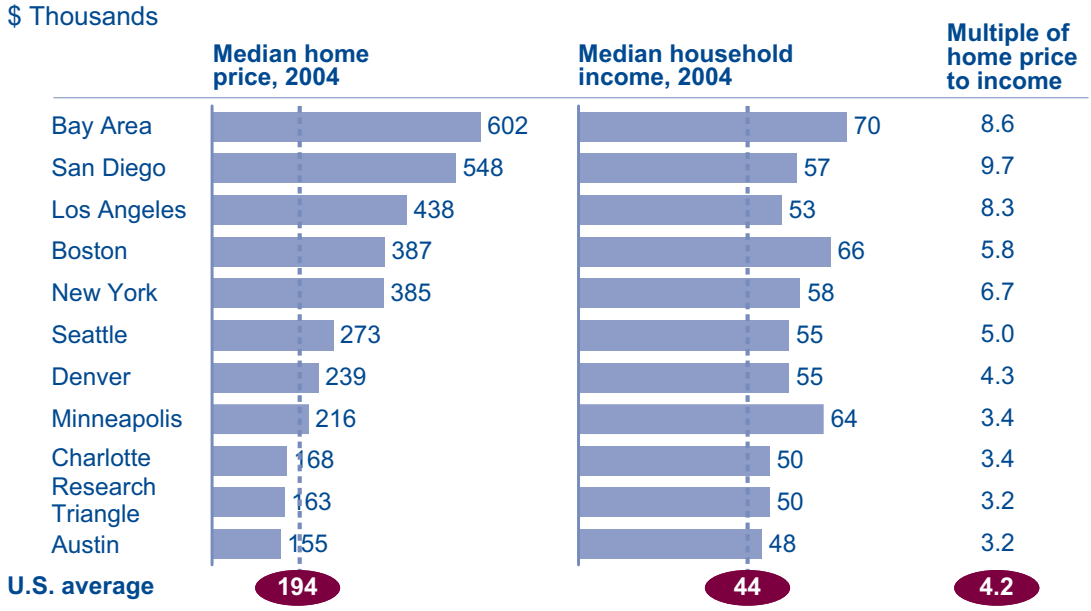
While Bay Area rents are more expensive than almost anywhere in the nation, house prices are daunting. They have grown faster than in other regions, and the median now exceeds $600,000. This figure is 8.6 times the median income, as opposed to 4.2 for the country as a whole. (Exhibits 23-24)

According to the federal government, housing is "affordable" if it costs 30% or less of a household's income. By that definition, the median household in the Bay Area making $70,000 per year should spend no more than $1,750 per month on housing. According to the

EXHIBIT 23

CALIFORNIA HOMES ARE THE MOST EXPENSIVE…

$ Thousands

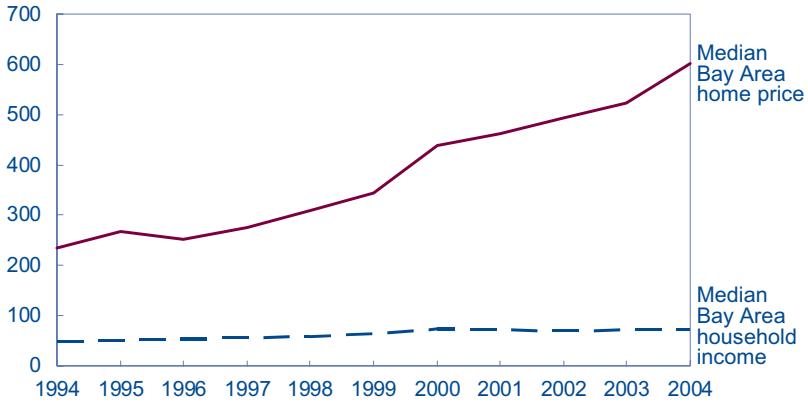


Source: Moody's Economy.com; McKinsey analysis

EXHIBIT 24

…MAKING HOME OWNERSHIP OUT OF REACH FOR MEDIAN INCOME HOUSEHOLDS IN THE BAY AREA

$ Thousands



Median home price as multiple of median household income	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Bay Area	5.5	5.4	4.7	5.0	5.4	5.5	6.1	6.6	7.3	7.5	8.6
U.S.	3.2	3.1	3.1	3.2	3.2	3.2	3.3	3.5	3.8	4.0	4.4

Source: Moody's Economy.com; McKinsey analysis

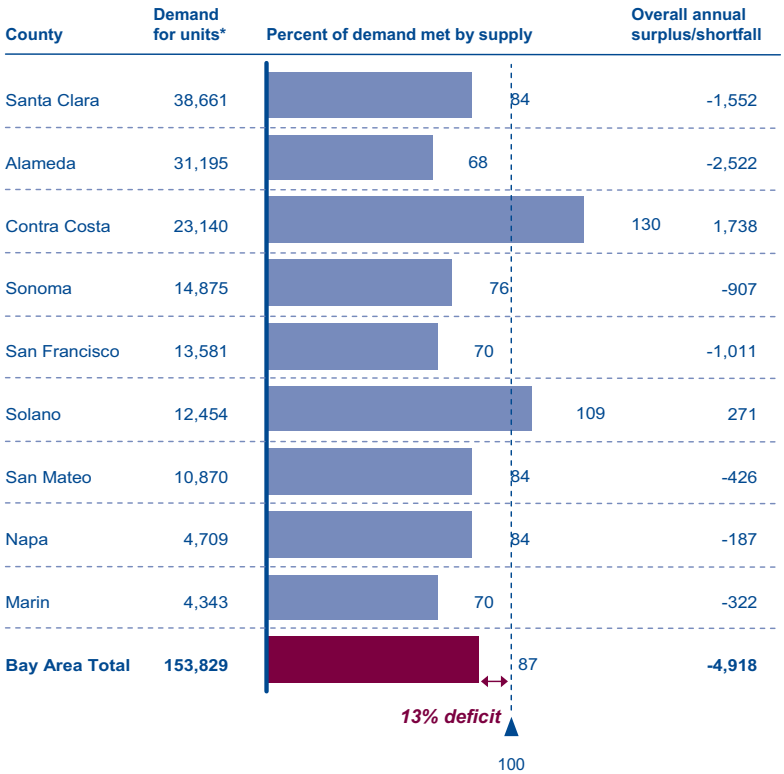
National Association of Homebuilders, only 18% of homes are affordable for the median-income household in the Bay Area.

One reason for the high cost is a shortage of homes. In most Bay Area counties, the demand for housing is outrunning the supply. On average, every 1.5 new jobs require 1 new housing unit. From 1999 through 2003, the Bay Area needed 153,829 new units, but created only 134,159, leaving a 13% deficit. Moreover, the Bay Area produced just 29% of the affordable housing needed for low-income residents, those earning 50-60% less than the area median income. This comes on top of a pre-existing housing deficit that has been accumulating for more than a decade. (Exhibit 25)

EXHIBIT 25

THE BAY AREA'S HOUSING SUPPLY IS NOT KEEPING UP WITH DEMAND

Units, 1999-2003



* The Bay Area Council assumes one new housing unit for every 1.5 new jobs, in line with actual region average

Source: Bay Area Council, "Bay Area Housing Profile – 2004"

2.4. Infrastructure is overburdened

Another pressing challenge before the Bay Area is its overstressed infrastructure, which is marked by underinvestment across almost all components – roads and bridges, public transit, airports, ports, rail, warehousing/distribution centers, energy, water, schools, and emergency preparedness. Infrastructure weakness is not a problem unique to the Bay Area, but it is a serious one nonetheless.

Overall, infrastructure weaknesses can be everyday, uncommon, or extreme. Each is important. On a daily basis, the Bay Area faces problems such as traffic congestion. In rarer but foreseeable circumstances, it will confront crises like power shortages from prolonged hot weather or levee breaches from torrential rains. Finally, in extreme cases – a severe earthquake or a terrorist act – the Bay Area is vulnerable across the entire infrastructure network.

Roads/bridges. The Bay Area's 620-mile freeway system is the workhorse of the transportation network. In all, the region has over 1,400 miles of highways and residents drive 30 billion miles per year on them.

Investment in this network has not met escalating demand, and roads and highways have deteriorated since 2001. The Metropolitan Transportation Commission (MTC) estimates a shortfall of almost $6 billion for local road repairs in the region. (Exhibit 26)

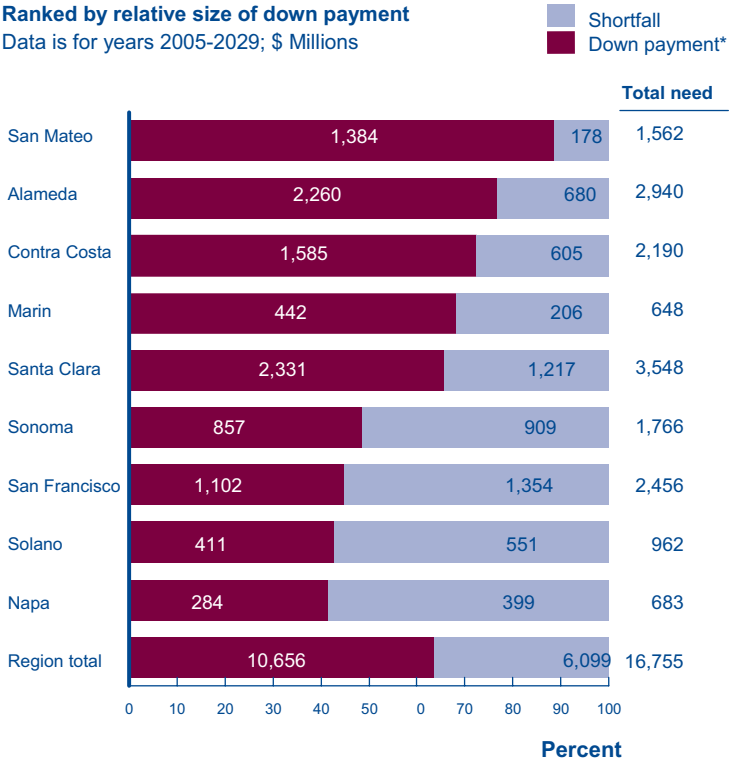
Congestion is also a serious problem. Peak travel times in the Bay Area have risen significantly, and local commuters sacrifice more time to the road than those in any of our comparable cities except Los Angeles. According to MTC estimates, congestion cost the Bay Area more than $3 billion in wasted time and fuel in 2003. (Exhibit 27)

The cause is not just growing population. As people move further away to find affordable housing and better schools, the number of commuters and the

EXHIBIT 26

THE MTC PROJECTS A $6 BILLION SHORTFALL IN FUNDS NEEDED TO MAINTAIN BAY AREA ROADS

Road maintenance expenditures by Bay Area County
Ranked by relative size of down payment
Data is for years 2005-2029; $ Millions



* Projected local, regional, state, and federal funds
Source: MTC

6. Bay Area Housing Profile – Bay Area Council: Second edition, 1999-2003.

EXHIBIT 27

BAY AREA COMMUTERS LOSE MORE TIME TO TRAVEL DELAYS AMONG COMPARABLE REGIONS, EXCEPT LOS ANGELES

Hours per auto traveler per year*

Urban area**	1993	2003	CAGR 1993-2003 Percent	Congestion cost*** $ Billions
Los Angeles	113	93	-1.9	10.7
San Francisco/Oakland	62	72	1.5	2.6
Seattle	56	46	-1.9	1.2
Boston	38	51	3.0	1.7
San Jose	53	53	0	0.8
Denver	38	51	3.0	1.1
New York	34	49	3.7	6.8
Minneapolis	30	43	3.7	1.0
San Diego	29	52	6.0	1.4
Charlotte	27	43	4.8	0.3
Austin	24	51	7.8	0.4
Research Triangle	21	27	2.5	0.2

* Defined as extra travel time for peak period travel during the year divided by the number of travelers who begin a trip during the peak period
** Defined similarly to MSA definitions of comparable regions and thus serves as a reasonable proxy to the regions on our benchmarking set
*** Defined as value of travel time delay (estimated at $13.45 per hour of person travel and $71.05 per hour of truck time) plus excess fuel consumption (estimated using state average cost per gallon)

Source: The 2005 Urban Mobility Report

length of their driving times rise. The flow of commercial goods is also increasing, intensifying congestion as trucks compete with cars for limited highway space.

Goods movement. Thirty-seven percent of the Bay Area's economic output is in industries that depend on the ability to move goods. This is particularly important for international trade. High-tech and high value commodities – such as electronics, precision instruments, motor vehicles – account for 50% of all goods transportation originating in the Bay Area. Moving them efficiently is important to the Bay Area's competitiveness and quality of life. Competition for land use – residential/commercial vs. the distribution/warehousing infrastructure vital for goods movement – as well as congestion on the roads, threaten the efficient movement of goods through the area.

Public transit. Despite considerable investment in public transit, the percentage of Bay Area commuters using it has decreased substantially over time and has been below 10 percent for the past 20 years. Overall transit ridership has fallen to a seven-year low in the Bay Area, despite increases last year in the number of BART and Caltrain passengers. A more efficient system and affordable housing along transportation corridors might encourage greater use of public transit and ease congestion on Bay Area roads.

Airports and ports. The Bay Area is the fifth largest trade gateway in the country by value. Containerized cargo at Bay Area ports is expected to double in the next 15 years, and air cargo to triple.

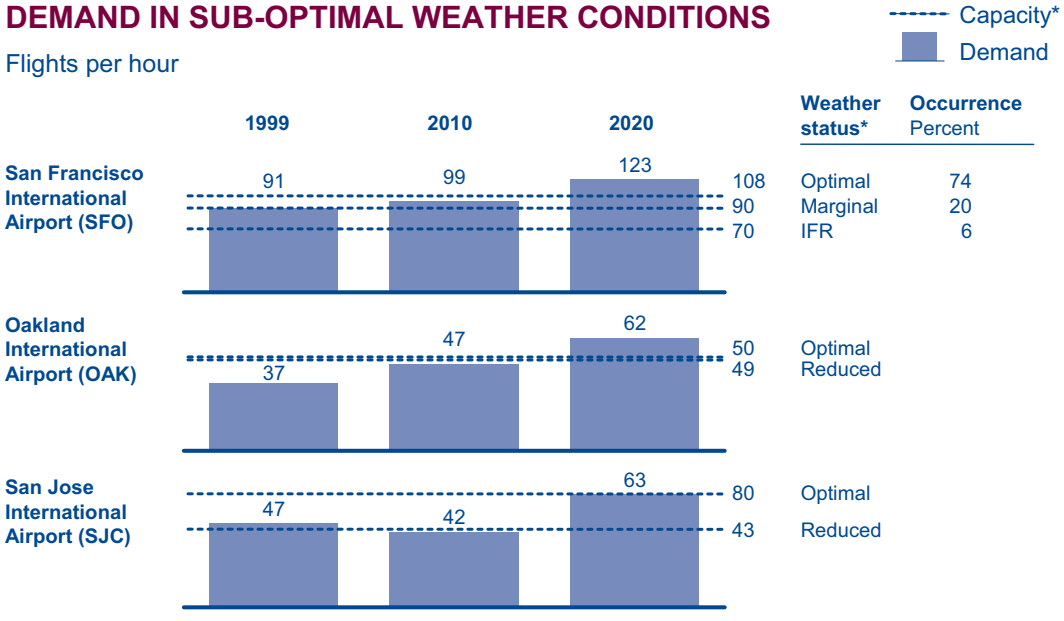
In addition to handling over 57 million passengers and 2 million containers each year, Bay Area airports and ports generate significant traffic in surrounding areas. The Port of Oakland, the largest in the Bay Area, is a key player in the busy Pacific Coast port system and the fourth largest container port in the continental US. Both the volume and the value of its traffic are increasing due to growing trade with Asia. While the Port is expanding to meet this growing demand, surrounding roads and arteries are filling with heavier truck traffic, and nearby neighborhoods are growing more concerned about air pollution. Limited rail and warehouse capacity are also constraints.

Relative to comparable airports and using FAA benchmarks that consider weighted weather scenarios, SFO has not yet reached capacity. However, in bad weather its runways can't handle demand. According to a 2000 study by the Regional Airport Planning Committee, neither SFO nor OAK will be able to cope with projected demand even under optimal weather much beyond 2010. (San Jose's airport will not approach capacity until 2020.) Given the time needed to expand runway capacity, planning must begin soon. (Exhibit 28)

EXHIBIT 28

BY 2010, BAY AREA AIRPORTS WILL BE UNABLE TO MEET DEMAND IN SUB-OPTIMAL WEATHER CONDITIONS

Flights per hour



* Capacity calculations consider runway configurations and are calculated for different weather scenarios:
Optimal = unlimited visibility;
Marginal = weather not good enough but better than instrument;
IFR = instrument conditions when radar separation between aircrafts is required.
Capacity benchmarks for OAK and SJC are from 2001; for SFO are from 2004

Source: Regional Airport System Plan 2000 by the Metropolitan Transportation Commission (MTC); ACI, FAA

Water. The Hetch Hetchy water system serves 2.4 million Bay Area residents and businesses in four counties. Completed back in 1934, it is a 167-mile, gravity driven network of dams, reservoirs, tunnels, pump stations, aqueducts and pipelines that moves Tuolumne River runoff from near Yosemite Valley to the Bay Area. Demand has already outstripped the assured supply from this system, and badly needed capital improvements are delayed.

The need for water is increasing. According to the Bay Area Water Supply and Conservation Agency (BAWSCA), by 2010 total water demand will be 12% higher than today. By 2030 it will be 23% higher. The system is expected to meet this need through a variety of sources as well as water conservation.

The Hetch Hetchy water system is vulnerable to a major earthquake. It crosses at least five active faults, while its major dam, reservoir, pipeline, tunnel and pump station components are aging and maintenance and upgrades have been deferred. Major components have no bypass capability in the event of failure, which could leave some customers without water for 10-30 days. Since commercial and industrial users would be the lowest priority, much business activity could cease within two or three days. If a San Andreas earthquake interrupted the water supply, the potential economic losses alone would be around $28.7 billion, according to some estimates.

The San Francisco Public Utilities Commission (SFPUC) has embarked on a multi-billion dollar program to rebuild its water system. The Water System Improvement Program will deliver capital improvements that enhance the SFPUC's ability to provide reliable, affordable, high-quality water to its regional customers in an environmentally sustainable manner. However, the program is behind schedule, and in November 2005 the SFPUC adopted a revised program with 28% higher total capital cost and an aggressive schedule.

Energy. Energy prices in the Bay Area remain among the highest in the nation. In general, power systems should operate with at least 15% in reserves, but California hasn't met that mark for years. In the last decade, peak demand has grown more rapidly than in-state capacity, causing energy facilities to operate below the 7% reserve margin that triggers a Stage One emergency (in which the state asks citizens to cut unneeded consumption). (Exhibit 29)

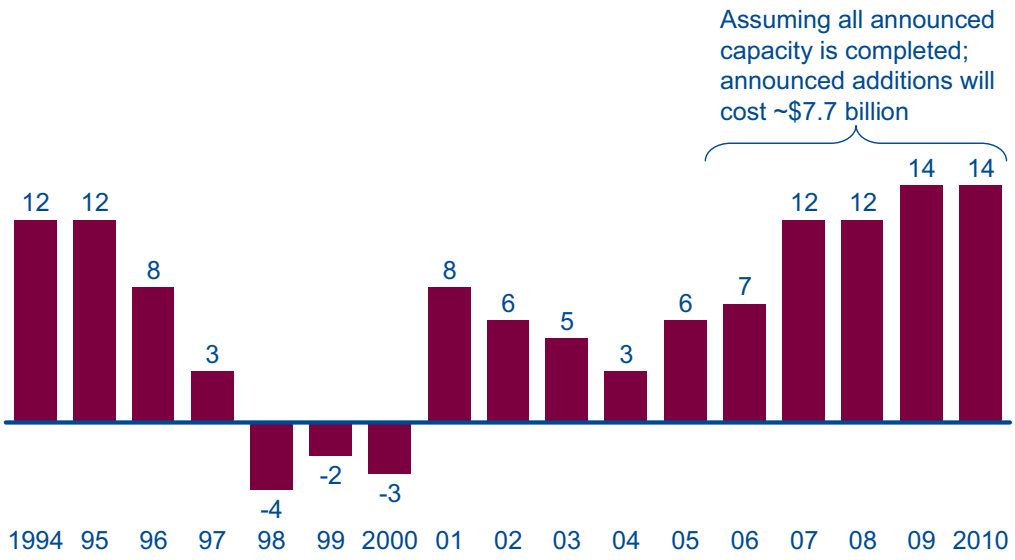
Since the supply increases promised after the power crises of 2001 have not materialized, the Bay Area's energy supply again hovers near emergency status. Based on announced capacity additions and retirements and the California Energy Commission's (CEC) projected demand, reserve margins will be 7% in 2006.

Given 2005 CEC forecasts under a moderate weather scenario, if capacity improvements finish on schedule, California's reserve levels will rise to acceptable levels. However, history suggests that this may not occur. Of the 28,000 MW of capacity announced for construction in California after the crisis, the state had a net increase of only 3,800

EXHIBIT 29

PROJECTED OPERATING RESERVE MARGINS FALL SHORT OF IDEAL 15% RESERVES

Operating reserve margin* in a moderate weather scenario
Percent



* Calculated as (available supply – peak demand)/(available supply); ideally, operating margin should exceed 15%
Source: CEC September 2005; Energy Information Administration; McKinsey analysis

MW by the fall of 2004. Much of the problem lies in the difficulty of attracting private investment, due to the "slow response of California policy makers to put in place clear and effective market rules and regulations."[7]

Emergency preparedness. The Bay Area is at risk for large scale disasters, including terrorist acts and especially earthquakes, as the great 1906 temblor showed. The Loma Prieta quake of 1989 was one-tenth as strong, yet it disabled part of the Bay Bridge and cost the local economy $10 billion.[8] According to a new earthquake risk assessment report, commissioned by the Federal Emergency Management Agency, there is a 2 in 3 chance of a major 6.7 earthquake or worse in the Bay Area in the next 30 years, which would compromise the effectiveness of much of the Bay Area's infrastructure – the roads, bridges, water, and energy. According to a recent study, a 7.9 earthquake, roughly the size of the one in 1906, could trigger $40 billion in damage to buildings and $59 billion in total economic losses.[9]

A quake under the west Delta could do similar damage. The Delta lies below sea level and only a system of earthen levees, many built by laborers in the 19th century, protects it. According to a recent report from the state's Department of Water Resources (DWR),

7. BAEF, "Lightning Strikes Twice," August 2004
8. LA Times, 1/8/06
9. Ibid

a 6.5 temblor – one weaker than Loma Prieta – could breach levees in more than 30 places and submerge 16 islands, 3,000 homes, and 85,000 acres of cropland. The flooding would pull salt water into the Delta from San Francisco Bay, compelling shutdowns of the State Water Project and the Central Valley Project, and drying up faucets in much of the Bay Area. It would also cut power and gas lines, and reduce power transmission to the entire state. The economic damage would be $30-40 billion.[10]

As the New Orleans floods showed, both investment and coordinated regional planning are critical for emergency preparedness. Yet in the Bay Area, a multi-tiered mosaic of governmental bodies has responsibility for much of the public infrastructure, and this fact complicates preparations. Effective disaster and homeland security preparedness must include proactive planning and coordination at all levels, as well as public education and awareness.

3. Recent developments in the Bay Area offer grounds for optimism

The Bay Area is nothing if not innovative, and its talent and spirit of creative problem solving can go far toward meeting the challenges the region faces. So can heightened awareness of the status quo and its implications. Ultimately, the problem is one of political will. If the public and its elected representatives make these issues a top priority, we will likely resolve them. Otherwise, conditions will almost certainly grow worse.

Recent progress. The Bay Area continues to pilot new initiatives. In 2004 the state enacted legislation permitting HOT (High Occupancy/Toll) lane demonstration projects on Interstate 680 and two roads in Santa Clara County. The MTC and its partners have developed 511 phone and web service to notify drivers of traffic conditions. It has also partly developed a system of roadside traffic sensors and other intelligent transportation system measures.

The Hetch Hetchy water system has received significant attention. On November 30, 2005, the SFPUC approved a revised 10-year, $4.3 billion construction plan to rebuild the 167-mile aqueduct to better protect against earthquakes and terror attacks.

Voter-approved measures. The public has approved numerous ballot measures related to infrastructure. For instance, in 2004 voters cast more than 2.5 million "yes" votes to improve mobility in the nine-county San Francisco Bay Area. Voters in seven counties delivered $8.5 billion in new transportation funding despite the supermajority required for passing county sales taxes and most other local transportation funding in California.

Similarly, Regional Measure 2 (RM2) raises tolls on the seven state-owned bridges by $1 to fund expansion and enhancement of public transit options in and around

10. Department of Water Resources report; LA Times 11/20/05

the bridge corridors. Voters approved an East Bay parcel tax to buoy AC Transit's financially strapped bus system and a property tax to finance $980 million of bonds for BART's seismic upgrade program.

Regional initiatives. These advances have occurred in a multi-tiered context of planning, advocacy, and vision that involves organizations across the Bay Area. Recognizing the challenges facing the region, but also its deep pool of local talent and entrepreneurship, the Bay Area's leadership has mobilized.

The sponsors of this report – the Bay Area Economic Forum, the Bay Area Council, and the Association of Bay Area Governments – regional agencies such as the Metropolitan Transportation Commission, and other key partners throughout the region are working to engage elected officials, business, labor and key institutions in a series of collaborative efforts to forge innovative but practical solutions.

This collaborative spirit is reflected in the Smart Growth Vision for the region, a multi-stakeholder public-private coalition (including the Bay Area Alliance, with active support from ABAG and the Bay Area Council). The Smart Growth Vision directs housing for population growth and jobs to be located near transit corridors, while emphasizing development in existing urban areas and compact and mixed-use development in suburbs.

To facilitate implementation of the Smart Growth Vision, a Joint Policy Committee has been formed to coordinate the regional planning of the Association of Bay Area Governments, the Bay Area Air Quality Management District , and the Metropolitan Transportation Commission. MTC is now requiring supportive land uses near new transit stations. Long a priority of the Bay Area Council, this policy will increase ridership on public transit and focus development around it for greater mobility in the region. Such integration of land use policy with public transit investments will relieve congestion, enhance the environment, reduce air pollution, and protect open space.

Other examples of current initiatives abound.

- **The Association of Bay Area Governments** is spearheading an effort to refine, focus and implement the regional vision by engaging local governments and key stakeholders in a regional planning process that emphasizes housing and support for infill development. Priority areas for development and protection will be identified, and knit together to form a Regional Growth Strategy that will inform implementation and future planning.
- **The Bay Area Council's Regional Transportation Initiative Strategic Plan** details the crucial ingredients for a comprehensive, multimodal, integrated transportation system. The Plan recognizes the need to better use current capacity, harness market forces, deploy smart technology, and promote more efficient land use patterns. The Bay Area Council places priority on developing a complete regional carpool/toll lane network, as well as a comprehensive "critical mass" water transit system.

- **The Bay Area Council Energy Committee** advocates policy changes to promote a competitive market for energy that provides a reliable supply. A key priority is to increase energy supply by expanding the portfolio of renewable energy sources.
- **The Bay Area Council Water Policy Committee,** is working to bring together infrastructure investments that will assure water quality and supply to a growing state while protecting the critical Bay-Delta ecosystem.
- **The Bay Area Economic Forum,** through its analyses and initiatives, is bringing together leaders from business, government, universities, labor and the community to address long-range economic challenges and opportunities. Its priorities include economic competitiveness, technological innovation, human capital development, manufacturing, trade and globalization, and infrastructure.
- **The Bay Area Science and Innovation Consortium (BASIC),** a partnership of scientific leaders representing the Bay Area's national laboratories, research universities, and corporate and nonprofit laboratories, is working on a range of critical issues including immigration policy affecting the research community, federal investment in research, the establishment of new research centers in the Bay Area, and intellectual property issues affecting collaboration between universities and business.
- **New California Network,** a statewide initiative launched by the Bay Area Economic Forum and Joint Venture: Silicon Valley Network, is mobilizing civic organizations and leaders throughout the state, and an extended grassroots network, to push for budget and governance reform in Sacramento.

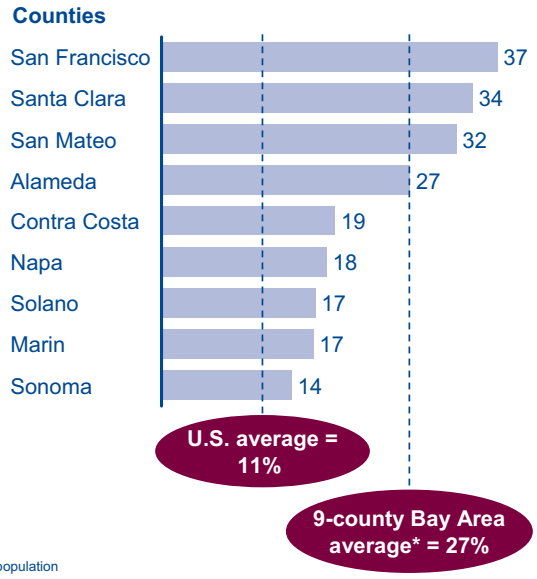
The Bay Area benefits from the nation's richest and most collaborative community of civic and nonprofit organizations, and many of its most creative minds. Though the region faces formidable challenges, we are optimistic that with its remarkable history of innovation, creativity and entrepreneurship, and with the necessary political will, the Bay Area will rise to meet them.

Appendix

I. Population and demographics

TWICE AS MANY BAY AREA RESIDENTS ARE FOREIGN-BORN COMPARED TO THE U.S. AVERAGE

Percent, foreign born persons by county, 2000

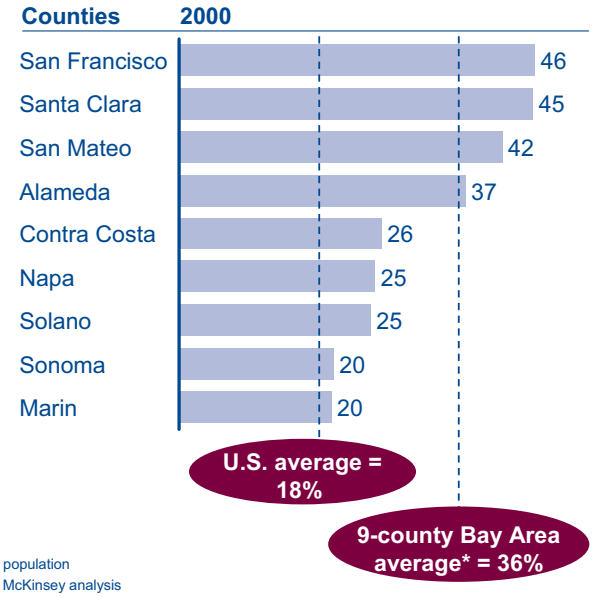


* Weighted average by population

Source: U.S. Census Bureau; McKinsey analysis

TWICE AS MANY BAY AREA RESIDENTS SPEAK A LANGUAGE OTHER THAN ENGLISH AT HOME COMPARED TO THE U.S. AVERAGE

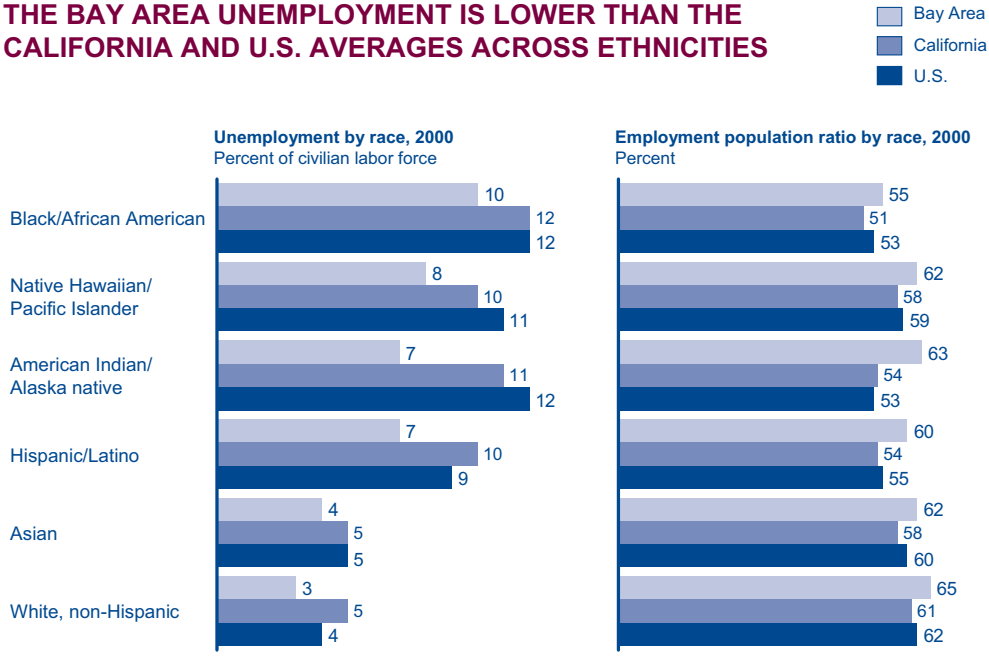
Percent, language other than English spoken at home, age 5+, by county



* Weighted average by population

Source: U.S. Census Bureau; McKinsey analysis

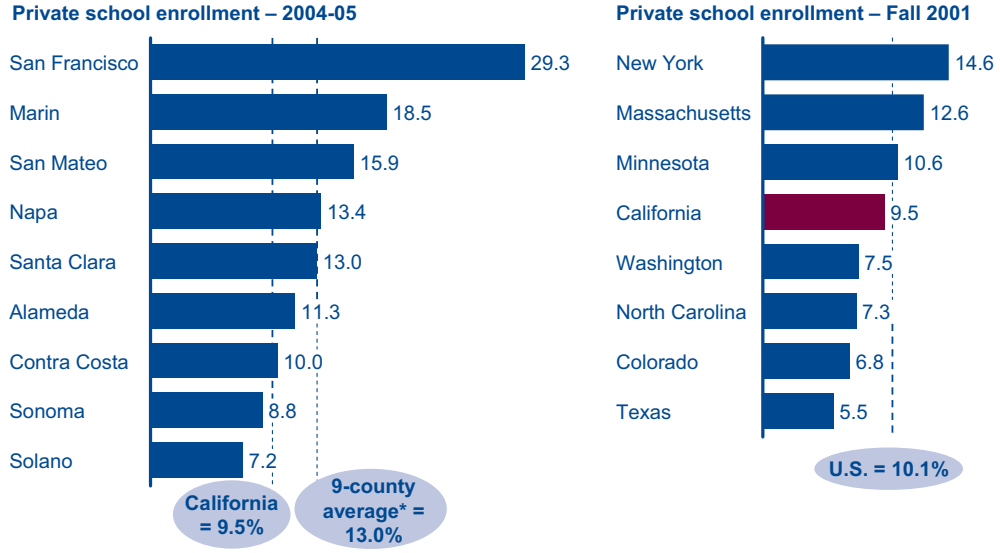
THE BAY AREA UNEMPLOYMENT IS LOWER THAN THE CALIFORNIA AND U.S. AVERAGES ACROSS ETHNICITIES



Source: U.S. Census Bureau; McKinsey analysis

THE BAY AREA HAS HIGHER PRIVATE SCHOOL ENROLLMENT THAN THE U.S., CALIFORNIA

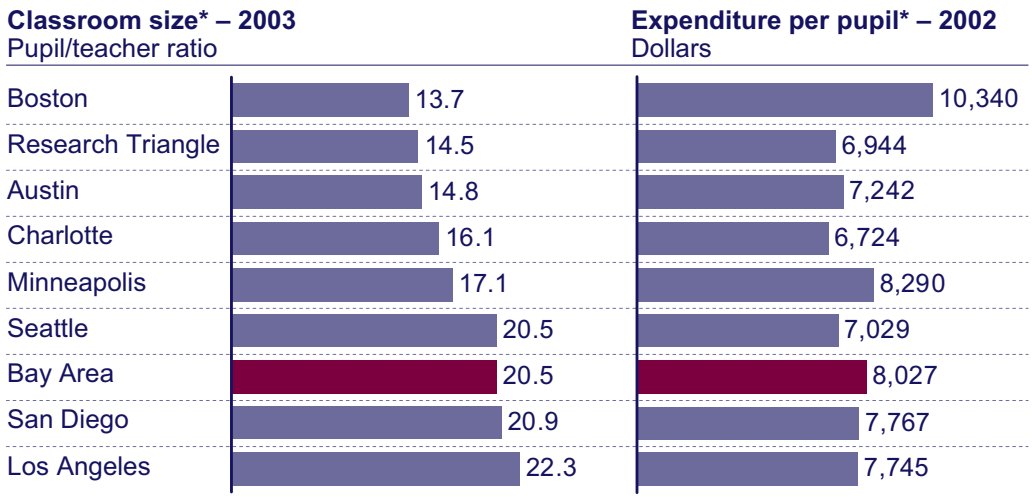
Percent



* Weighted average by county

Source: California Department of Education; NCES; McKinsey analysis

THE BAY AREA LAGS IN CLASS SIZE DESPITE RELATIVELY HIGH SPENDING PER PUPIL



* Weighted average for counties in MSA

Source: National Center for Education Statistics; Common Core of Data

II. Economy profile

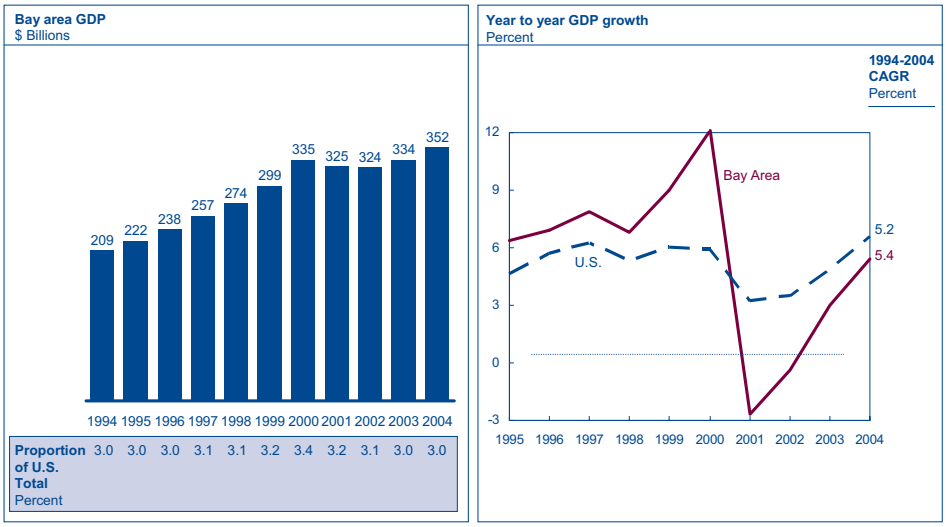
THE BAY AREA GDP PUTS IT IN THE TOP 30 WORLD ECONOMIES

$ Billions

Rank	GDP adjusted for purchasing power parity, 2004	
1	U.S.	11,734
2	China	7,066
3	India	3,981
4	Japan	3,748
5	Germany	2,218
6	Russia	2,081
7	U.K.	1,753
8	France	1,690
9	Brazil	1,577
10	Italy	1,481
11	Mexico	1,111
12	Canada	1,097
13	Spain	961
14	Indonesia	951
15	South Korea	781
16	Iran	679
17	Bangladesh	633
18	Turkey	632
19	Australia	621
20	Thailand	548
26	Pakistan	423
27	Ukraine	384
28	Saudi Arabia	363
29	Bay Area	352
30	Colombia	306

Source: Global Insight; McKinsey analysis

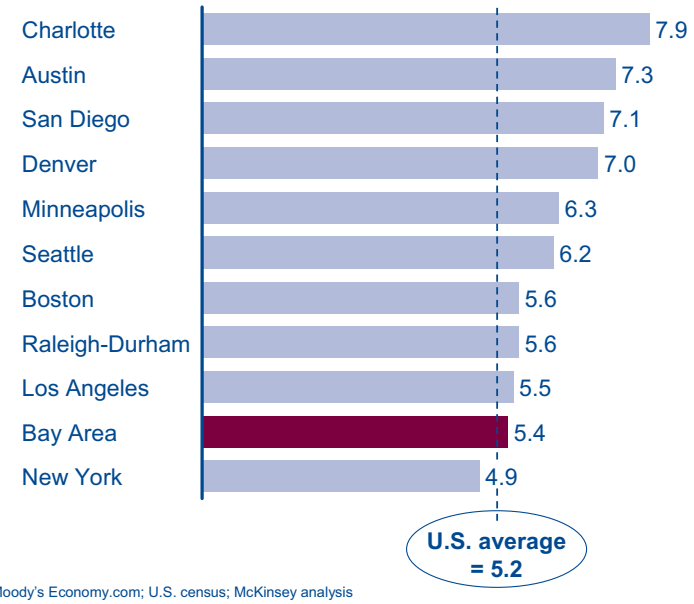
THE BAY AREA GDP GROWTH HAS BEEN VOLATILE, BUT COMPARABLE TO U.S. GDP GROWTH OVER TIME



Source: Moody's Economy.com; McKinsey analysis

BAY AREA'S GDP GROWTH HAS LAGGED THAT OF COMPARABLE REGIONS, BUT HAS EXCEEDED U.S. GDP GROWTH

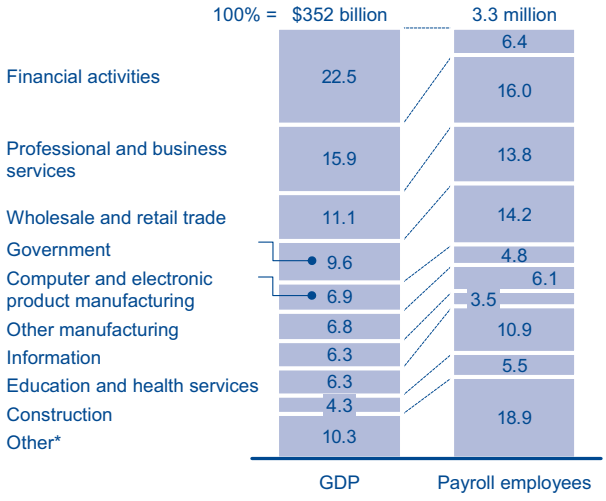
GDP growth CAGR, 1994-2004



Source: Moody's Economy.com; U.S. census; McKinsey analysis

THE BAY AREA ECONOMY IS DIVERSE

Economy share by sector, 2004
Percent

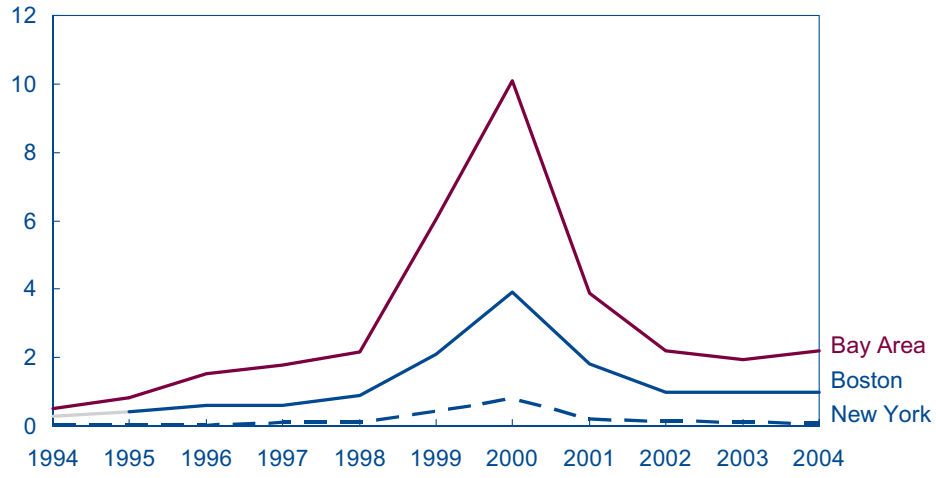


* Other includes: other services, transportation and utilities, leisure and hospitality, natural resources and mining, non-BLS sectors

Source: Moody's Economy.com; BLS

BAY AREA VENTURE CAPITAL IS HIGHER THAN THAT IN COMPARABLE REGIONS AS A SHARE OF THE LOCAL ECONOMY

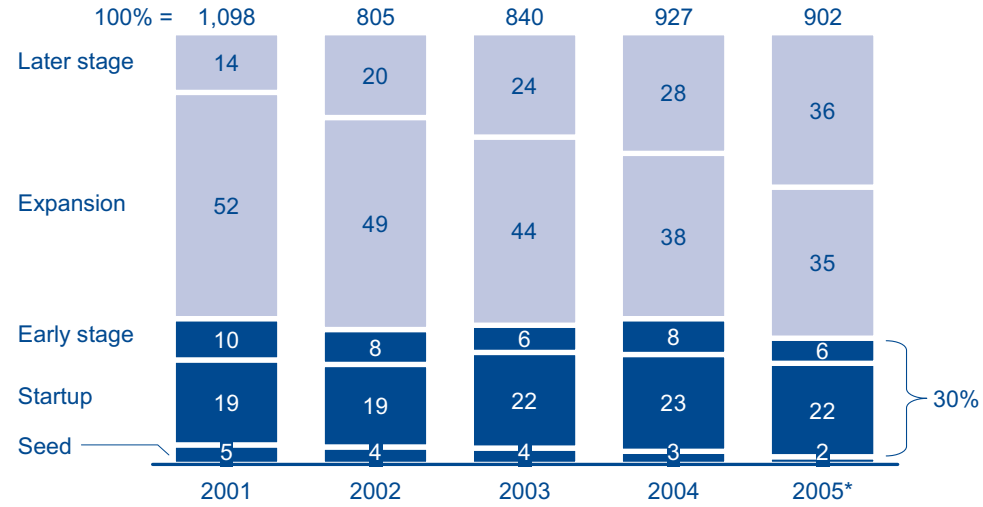
Venture capital investment
Percent of local GDP



Source: Venture Economics/National Venture Capital Association; McKinsey analysis

IN TERMS OF NUMBER OF DEALS, EARLIER STAGE BAY AREA COMPANIES CAPTURE A THIRD OF VENTURE CAPITAL

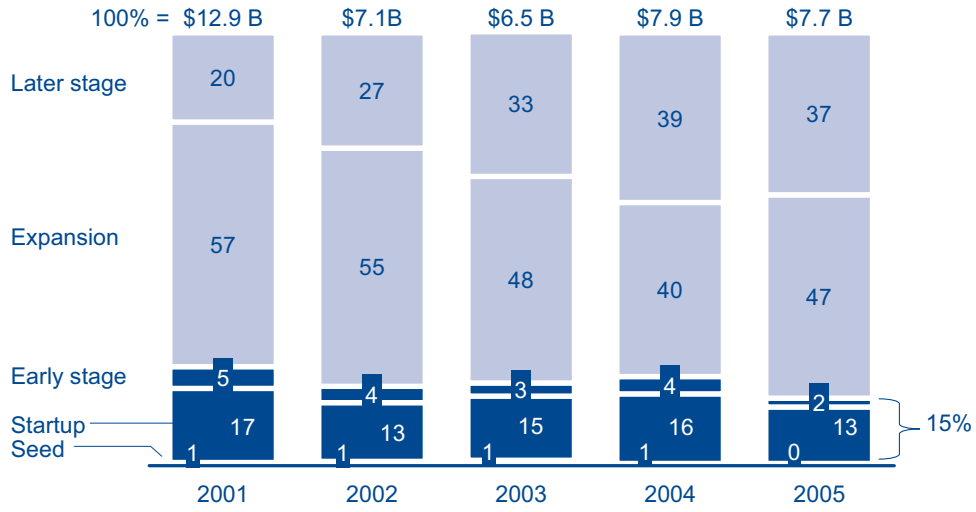
Bay Area venture capital deals by stage of company
Percent



* Numbers do not add to 100 due to rounding error
Source: Thomson Venture Economics/NVCA

IN TERMS OF TOTAL INVESTMENT, LATER STAGE BAY AREA COMPANIES CAPTURE THE BULK OF VENTURE CAPITAL

Bay Area venture capital total investment by stage of company
Percent



Source: Thomson Venture Economics/NVCA

THE BAY AREA IS A HUB OF INNOVATION

NOT EXHAUSTIVE

Examples of research centers

Corporate research
- Technology
- Biotechnology
- Nanotechnology
- Medical research
- Homeland security research

National Laboratories and Independent Institutes
- Lawrence Berkeley National Lab
- Lawrence Livermore National Lab
- NASA Ames Research Center
- Sandia National Labs
- SRI
- Stanford Linear Accelerator Center

Research Universities
- UC Berkeley
- UC Davis
- UC Santa Cruz
- UC San Francisco
- Stanford University

State Research Centers
- California Institute Of Regenerative Medicine (stem cell research)
- California Institute for Quantitative Biomedical Research (QB3)
- CITRIS

Source: Bay Area Economic Forum

LEADING BAY AREA UNIVERSITIES ACCOUNT FOR A LARGE SHARE OF R&D EXPENDITURES

Total R&D expenditures at universities and colleges, 2002*

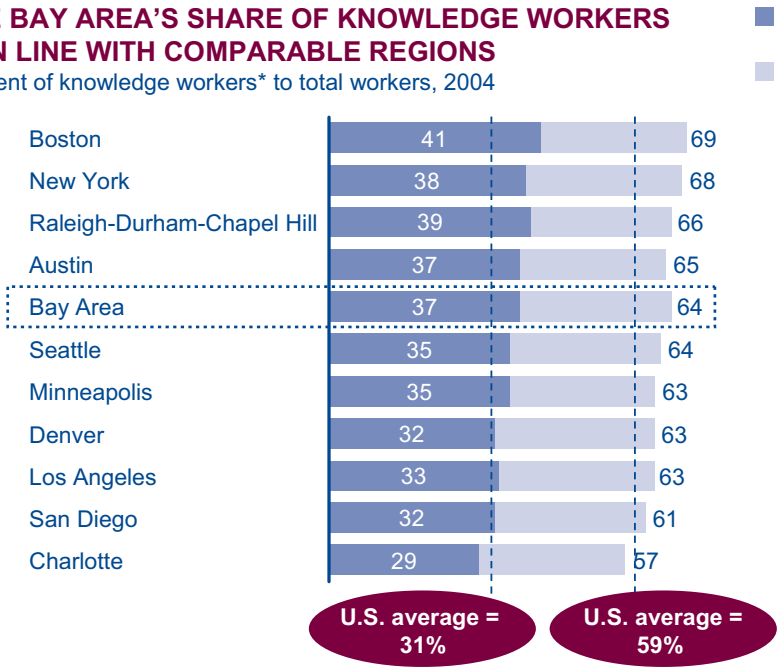
Bay Area University	Rank in total R&D expenditures	R&D $ Millions
• UC San Francisco	6	597
• Stanford University	8	538
• UC Berkeley	13	474
• UC Davis	14	456
• UC Santa Cruz	128	71

- All 5 leading Bay Area Universities rank intop 130 of 617 institutions
- Combined, they capture 6.7% of national R&D academic expenditures

* Total expenditures include both private and public, Federal, State, and local expenditures
Source: National Science Foundation; McKinsey analysis

THE BAY AREA'S SHARE OF KNOWLEDGE WORKERS IS IN LINE WITH COMPARABLE REGIONS

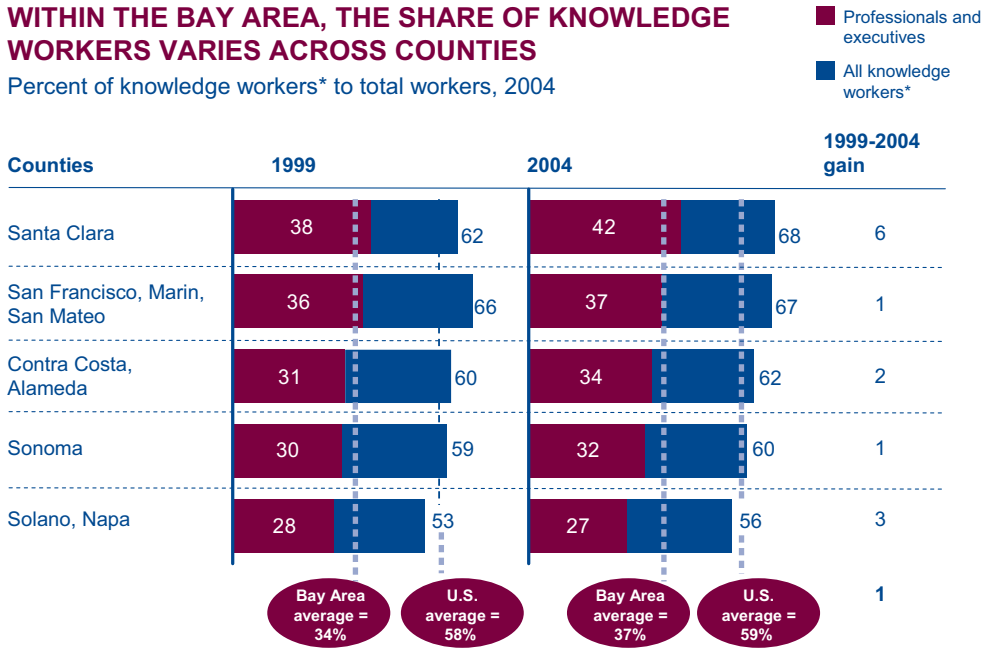
Percent of knowledge workers* to total workers, 2004



* Knowledge workers defined as the sum of the "professional", "executive", "sales" and "administrative support" occupational groups
Source: Bureau of Labor Statistics; McKinsey analysis

WITHIN THE BAY AREA, THE SHARE OF KNOWLEDGE WORKERS VARIES ACROSS COUNTIES

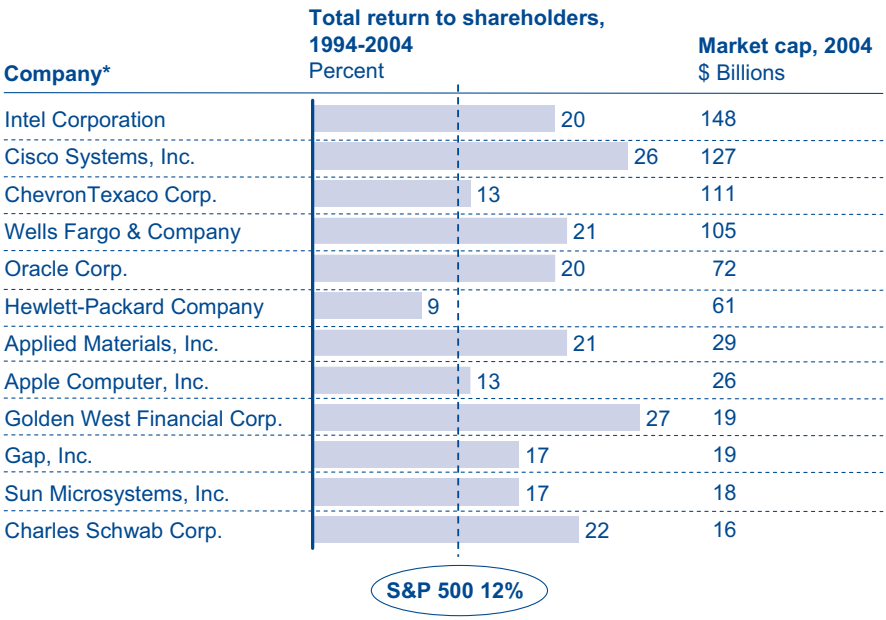
Percent of knowledge workers* to total workers, 2004



* Knowledge workers defined as the sum of the "professional", "executive", "sales" and "administrative support" occupational groups

Source: Bureau of Labor Statistics; McKinsey analysis

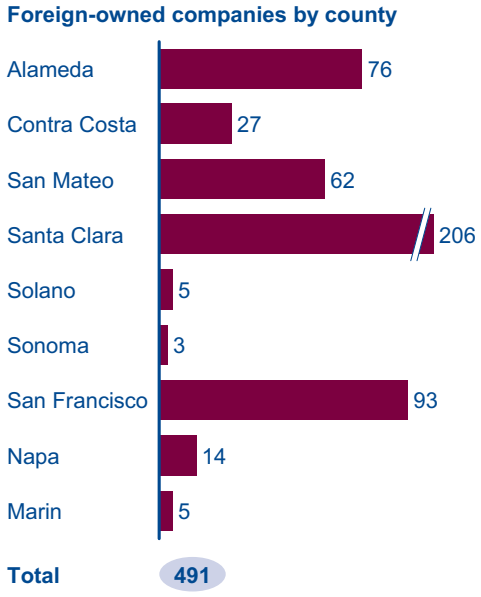
LARGE BAY AREA COMPANIES OUTPERFORM THE MARKET



* Companies with largest market capitalization among Bay Area companies in the Fortune 500 list

Source: Research Insight; Datastream; Bloomberg

THE BAY AREA IS HOME TO NEARLY 500 FOREIGN-OWNED COMPANIES

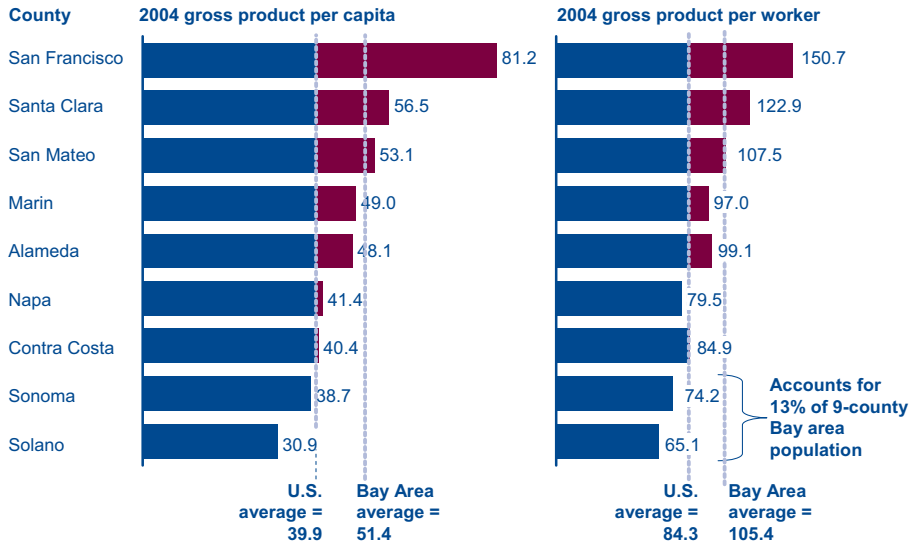


Source: Uniworld Business Publications; McKinsey analysis

III. Productivity and cost of living

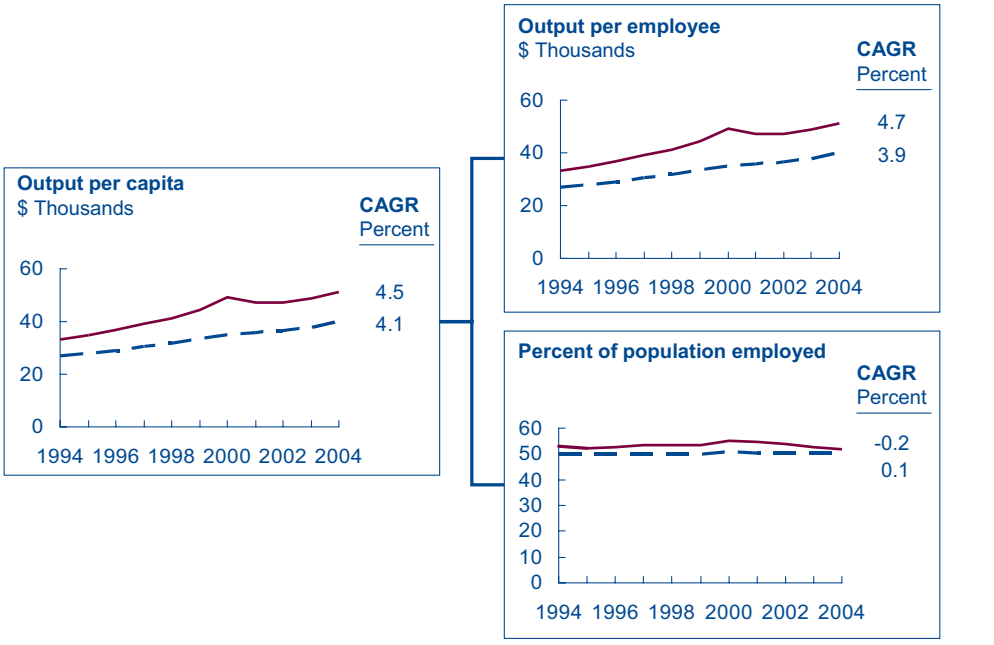
THE BAY AREA PRODUCTIVITY IS HIGHER THAN U.S. AVERAGE IN MOST COUNTIES

$ Thousands



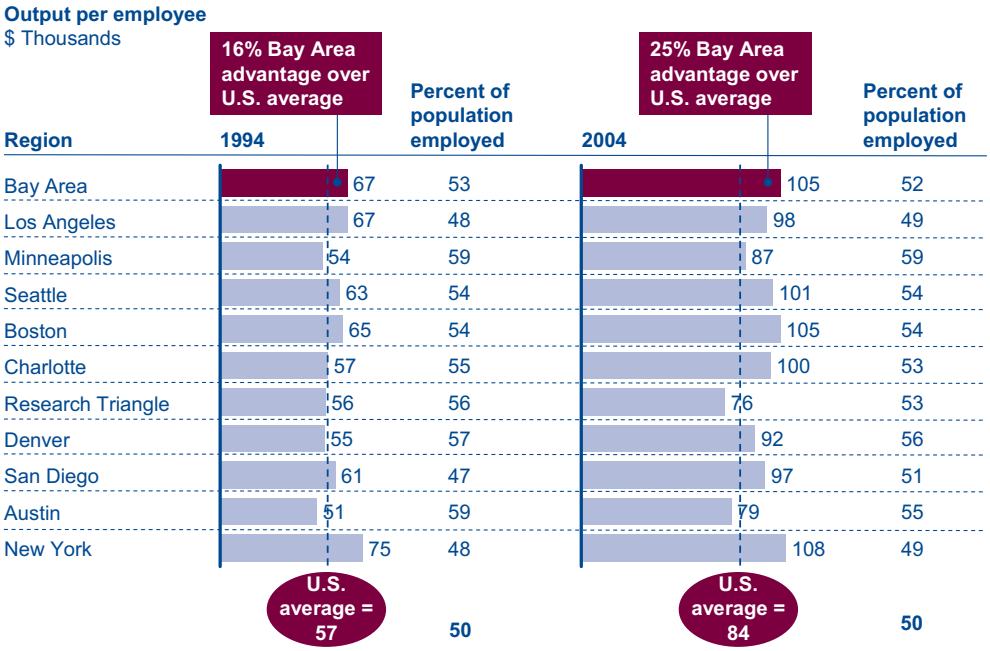
Source: Moody's Economy.com; U.S. census; McKinsey analysis

BAY AREA'S PRODUCTIVITY INCREASE HAS COME FROM HIGHER OUTPUT PER EMPLOYEE



Source: Moody's Economy.com; McKinsey analysis

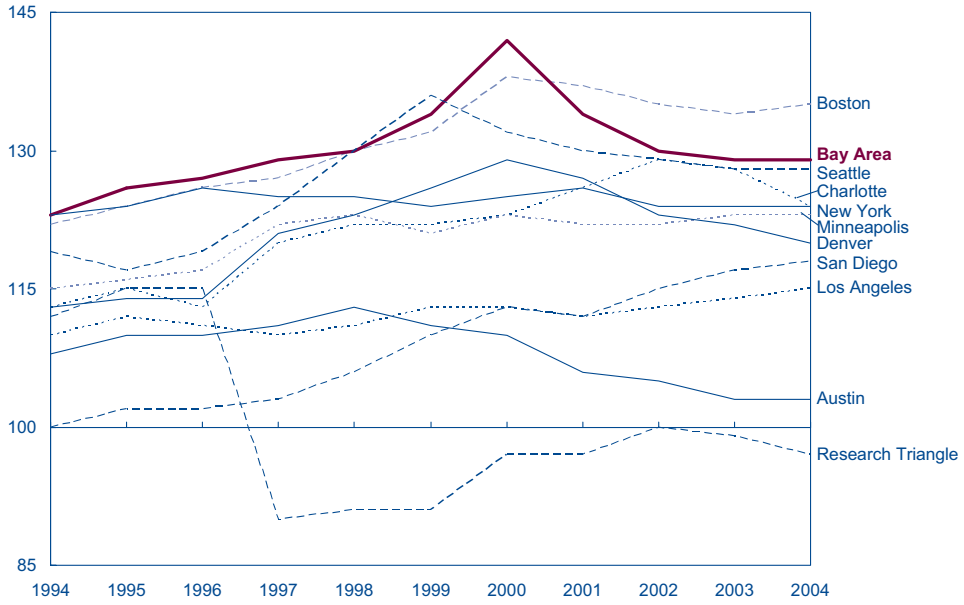
THE BAY AREA ENJOYS HIGH OUTPUT PER EMPLOYEE



Source: Moody's Economy.com; U.S. Census; McKinsey analysis

THE BAY AREA HAS BEEN A LEADER IN PRODUCTIVITY FOR MOST OF THE PAST DECADE

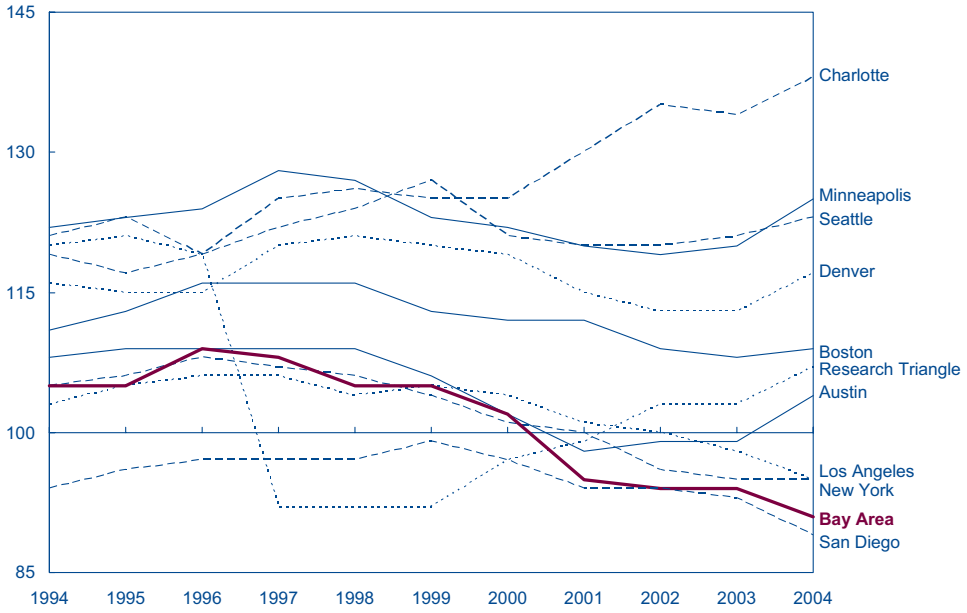
Index to U.S. average



Source: Moody's Economy.com; McKinsey analysis

THE BAY AREA LAGS IN COST-ADJUSTED RELATIVE PRODUCTIVITY

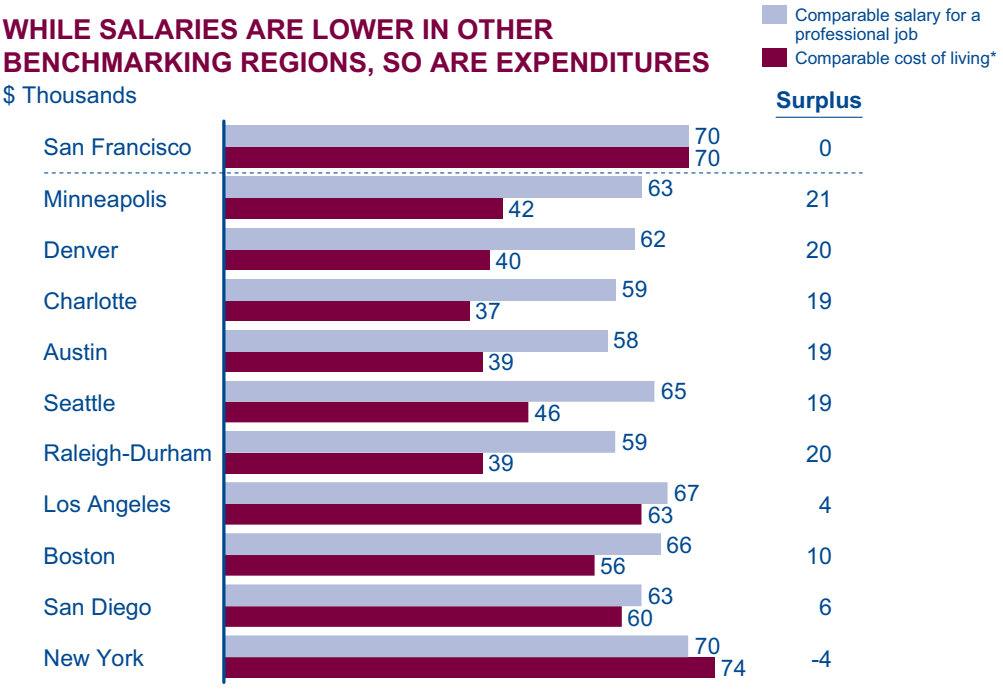
Index to U.S. average



Source: Moody's Economy.com; McKinsey analysis

WHILE SALARIES ARE LOWER IN OTHER BENCHMARKING REGIONS, SO ARE EXPENDITURES

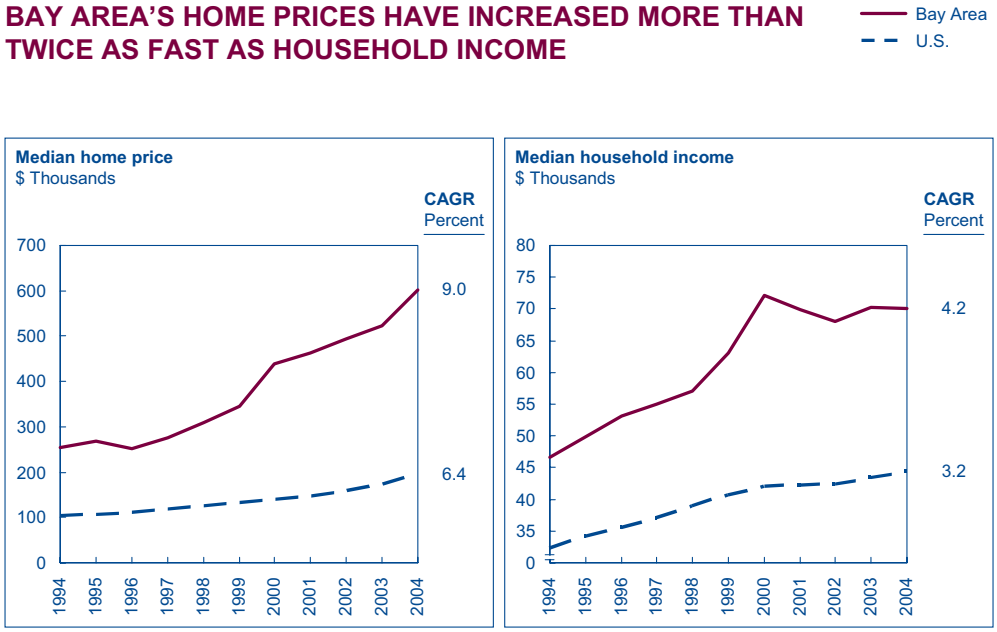
$ Thousands



* Expenditures based on average for professional household

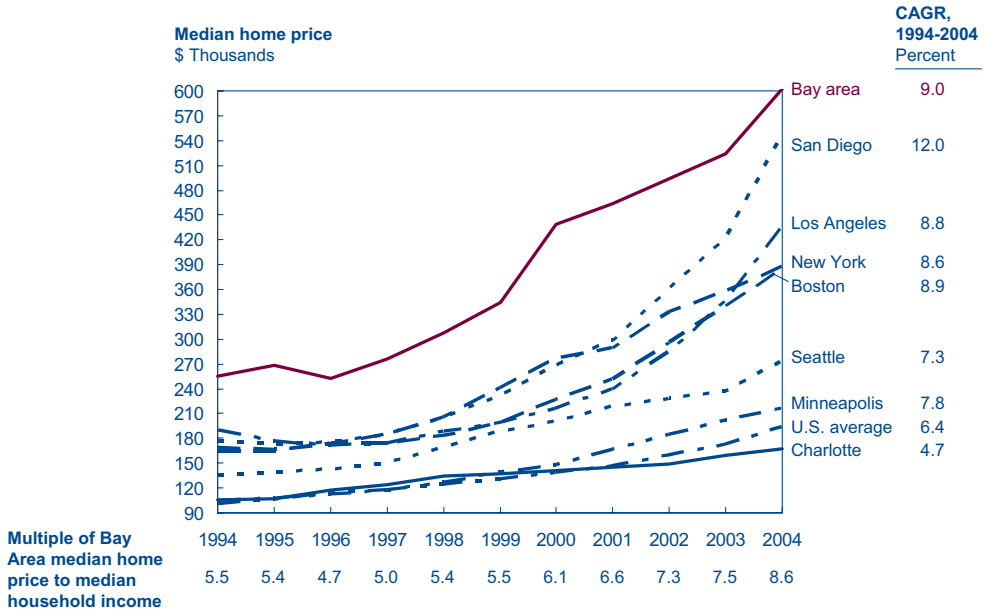
Source: Salary.com; ACCRA cost of living index; McKinsey analysis

BAY AREA'S HOME PRICES HAVE INCREASED MORE THAN TWICE AS FAST AS HOUSEHOLD INCOME



Source: Moody's Economy.com; McKinsey analysis

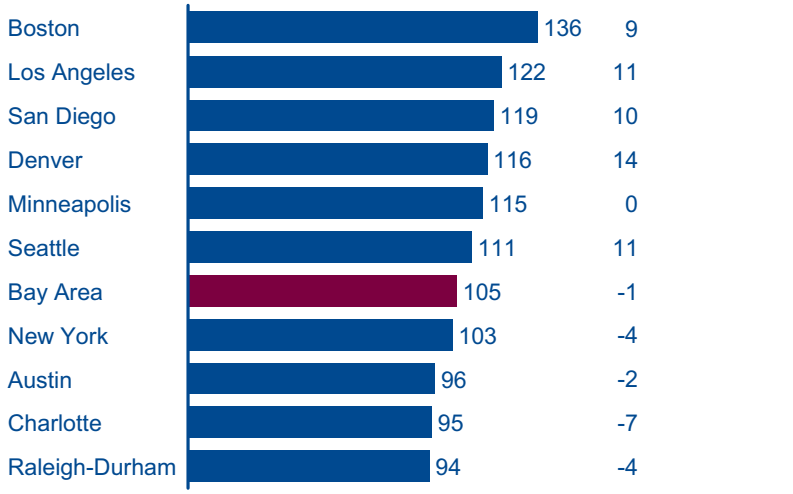
HOME PRICES ARE THE HIGHEST IN THE BAY AREA AMONG COMPARABLE REGIONS



Source: Moody's Economy.com; McKinsey analysis

WAGE COMPONENT OF LABOR COSTS IN THE BAY AREA IS SIMILAR TO THE U.S. AVERAGE

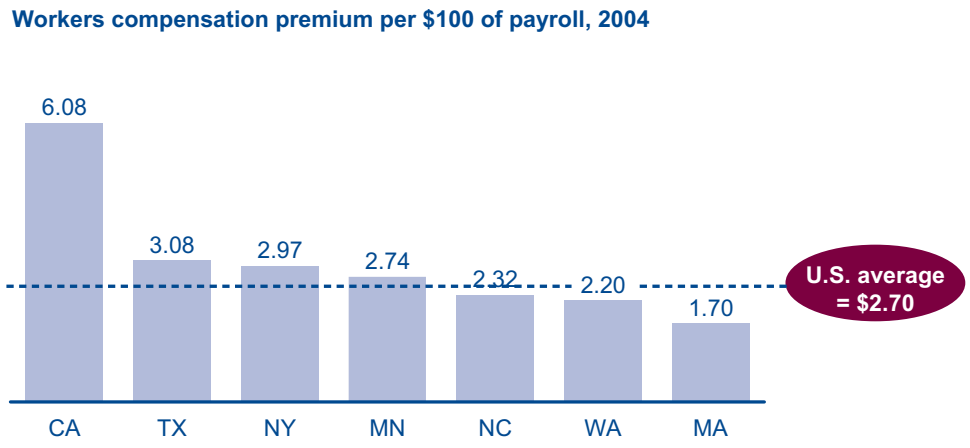
Total wage and salary payments per dollar of output indexed to 100 for U.S. average, 2003



Source: Moody's Economy.com; McKinsey analysis

HIGH WORKERS COMPENSATION PREMIUMS INCREASE THE COST OF LABOR

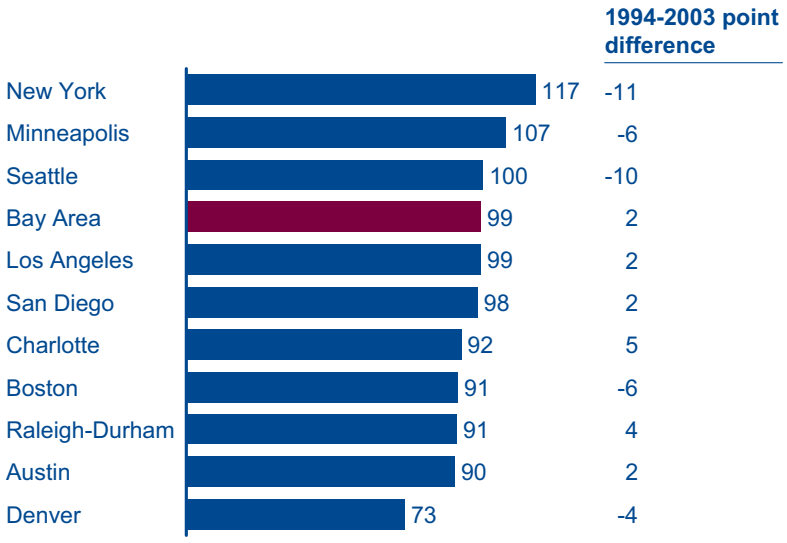
Dollars



Source: Oregon Department of Consumer and Business Services

THE BAY AREA'S EFFECTIVE TAX RATE IS SIMILAR TO THE U.S. AVERAGE

2003 effective tax rate* indexed to 100 for U.S. average

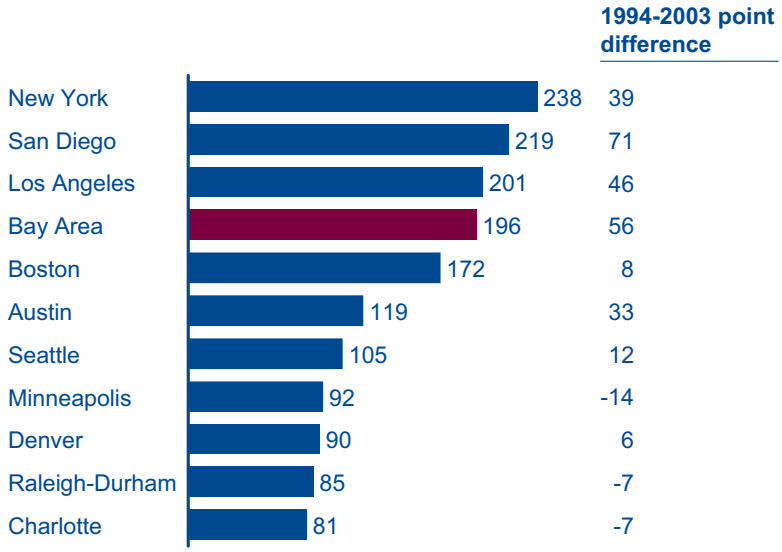


* Effective tax rate is defined as total relevant tax revenues (personal, property, and corporate taxes) divided by total personal income in each region

Source: Moody's Economy.com; McKinsey analysis

THE COST OF COMMERCIAL AND INDUSTRIAL ENERGY IN THE BAY AREA IS NEARLY TWICE THE U.S. AVERAGE

2003 unit energy costs* indexed to 100 for U.S. average

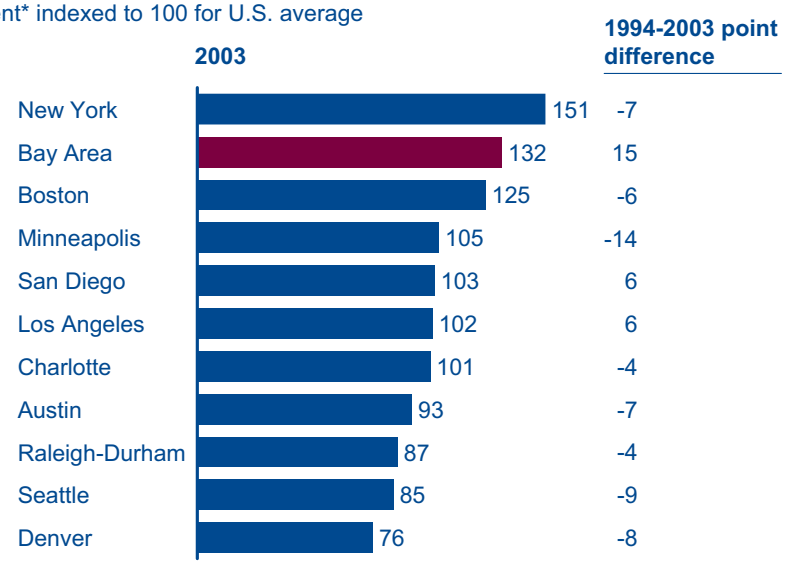


* Energy costs are defined as average commercial and industrial electricity costs in cents per kilowatt hour

Source: Moody's Economy.com; McKinsey analysis

BAY AREA OFFICE RENTS HAVE BECOME MORE EXPENSIVE RELATIVE TO OTHERS

Office rent* indexed to 100 for U.S. average



* Office rent is defined as average rent per square foot of office space

Source: Moody's Economy.com; McKinsey analysis

IV. Infrastructure

PEAK TRAVEL TIMES IN SAN FRANCISCO ARE THE SECOND HIGHEST AMONG COMPARABLE REGIONS

Travel time index*

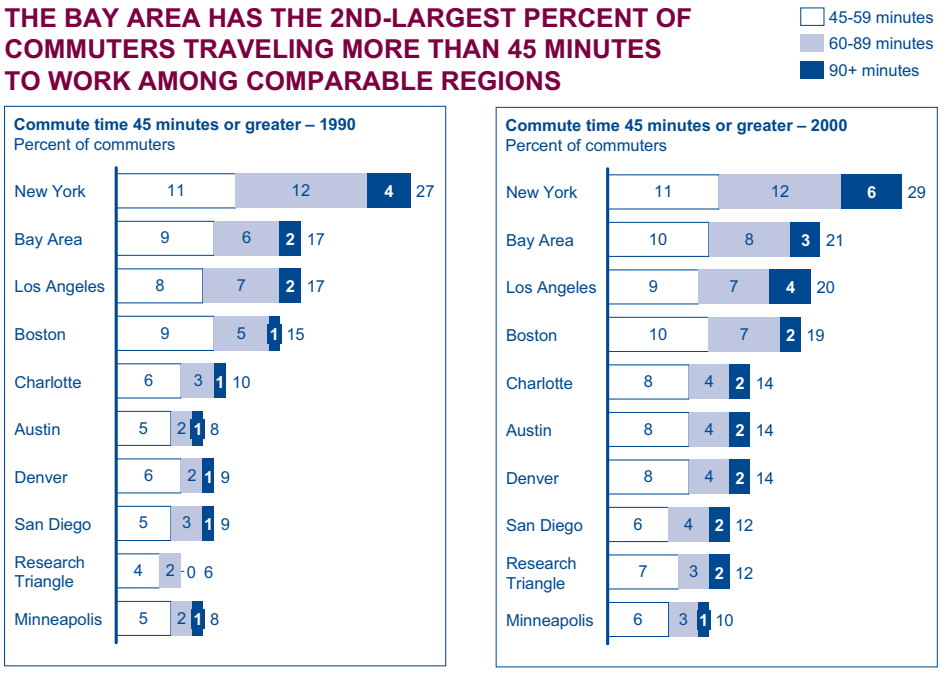
Urban area**	1993	2003	Point change in peak-period time penalty 1993-2003
Los Angeles	1.73	1.75	0.02
San Francisco/Oakland	1.44	1.54	0.10
Seattle	1.35	1.38	0.03
San Jose	1.34	1.37	0.03
New York	1.28	1.39	0.11
Boston	1.26	1.34	0.08
Denver	1.24	1.40	0.16
San Diego	1.22	1.41	0.19
Charlotte	1.17	1.31	0.14
Minneapolis	1.16	1.34	0.18
Austin	1.14	1.33	0.19
Research Triangle	1.12	1.19	0.07

* Travel time index – the ratio of travel time in peak period to travel time at the free-flow conditions. A value of 1.35 indicates a 20-minute free-flow trip take 27 minutes in the peak

** The 2005 Urban Mobility Report defines urban areas similarly to MSA definitions of comparable regions and thus serves as a reasonable proxy

Source: The 2005 Urban Mobility Report; McKinsey analysis

THE BAY AREA HAS THE 2ND-LARGEST PERCENT OF COMMUTERS TRAVELING MORE THAN 45 MINUTES TO WORK AMONG COMPARABLE REGIONS



Source: U.S. Census Bureau, McKinsey analysis

MOST BAY AREA COMMUTERS STAY WITHIN THEIR OWN COUNTY

Thousands of workers

	To										
From	San Francisco	Santa Clara	Alameda	San Mateo	Contra Costa	Napa	Sonoma	Solano	Marin	Other	Total
San Francisco	322	16	21	43	5	<1	<1	<1	6	4	419
Santa Clara	8	728	37	41	3	<1	<1	<1	<1	11	829
Alameda	72	70	454	34	36	<1	<1	2	<1	7	679
San Mateo	72	55	15	206	2	<1	<1	<1	1	2	354
Contra Costa	50	10	96	9	255	1	1	<1	7	7	442
Napa	1	<1	1	<1	2	44	2	4	1	1	57
Sonoma	8	1	2	2	2	3	184	1	18	3	225
Solano	10	2	13	3	22	8	2	99	4	11	175
Marin	31	1	5	3	3	<1	3	<1	79	2	127
Outside 9-County Bay Area	13	64	41	13	10	2	4	9	2	-	**158**
Total	**587**	**947**	**684**	**353**	**338**	**60**	**200**	**123**	**123**	**48**	**-**

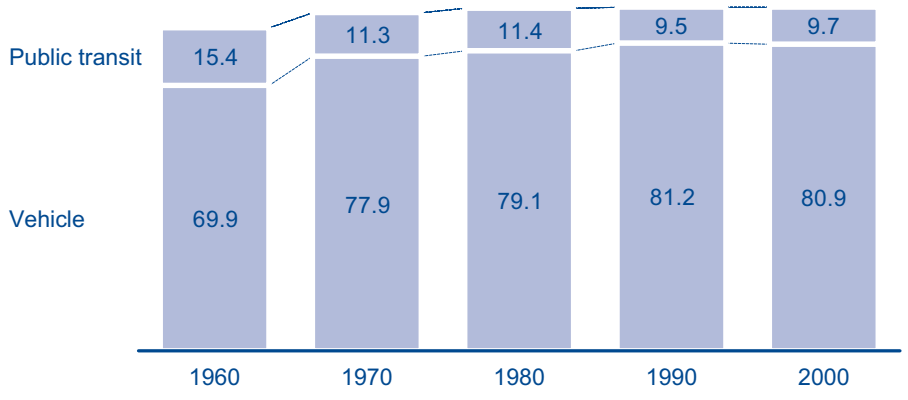
Nearly 158,000 workers commute into the Bay Area from neighboring counties

Source: U.S. Census 2000; McKinsey analysis

THE PERCENTAGE OF BAY AREA COMMUTERS USING PUBLIC TRANSIT HAS DECREASED SUBSTANTIALLY OVER TIME

Bay Area commuter transportation mode

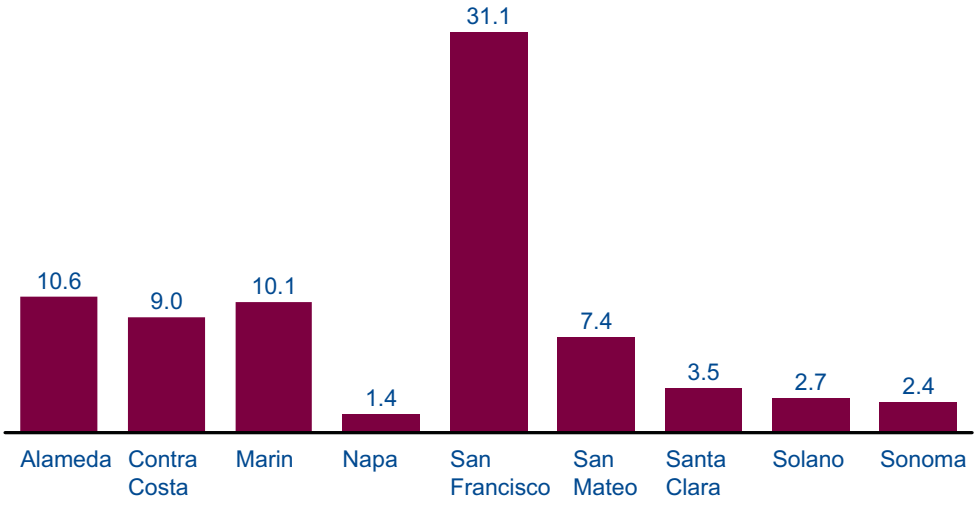
Percent



Source: U.S. Census Bureau

SAN FRANCISCO IS THE ONLY COUNTY IN THE BAY AREA IN WHICH A SIGNIFICANT SHARE OF COMMUTERS USE PUBLIC TRANSIT

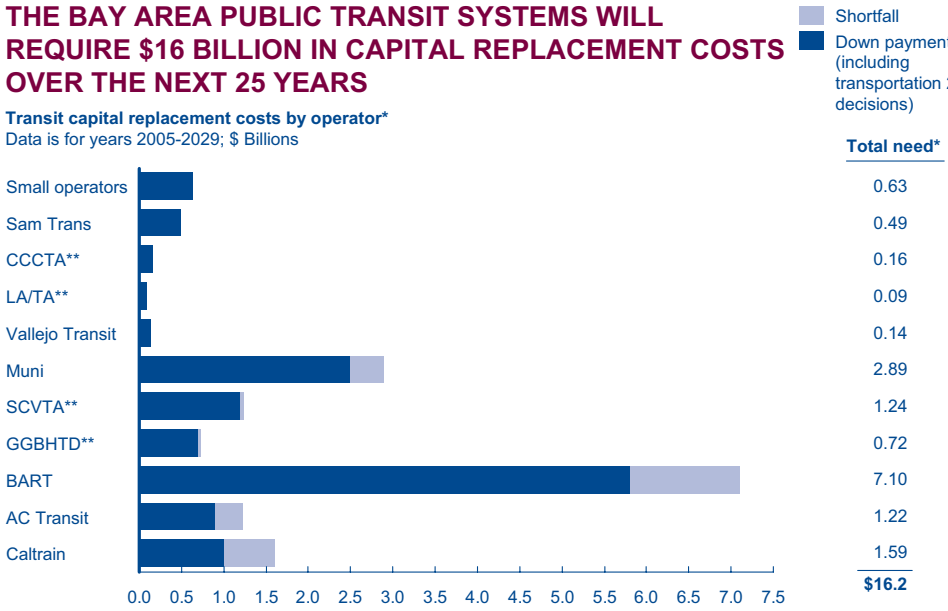
Commuters using public transit
Percent



Source: U.S. Census 2000

THE BAY AREA PUBLIC TRANSIT SYSTEMS WILL REQUIRE $16 BILLION IN CAPITAL REPLACEMENT COSTS OVER THE NEXT 25 YEARS

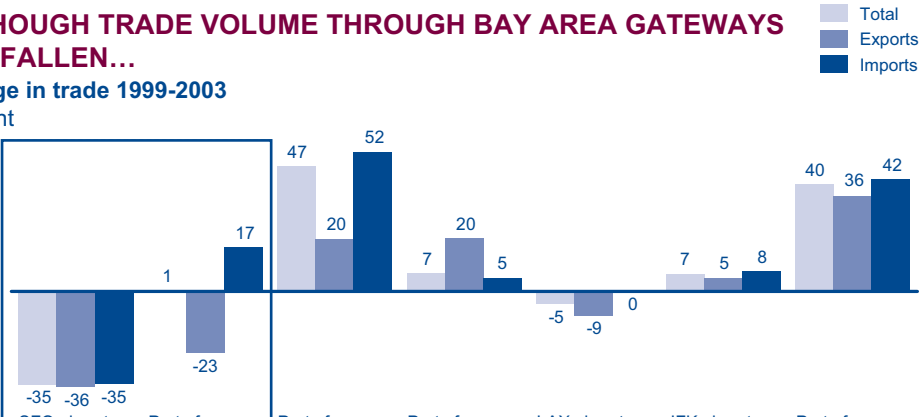
Transit capital replacement costs by operator*
Data is for years 2005-2029; $ Billions



* Total transit capital replacement needs are estimated based on data available from each operator at the time of the analysis. Commission policy that directs regional discretionary funding to cover the shortfall may take into account differences in 25-year projected shortfalls and needs identified in the near term
** CCTA = Central Contra Costa Transit Authority; LAVTA = Livermore-Amador Valley Transportation Authority; SCVTA = Santa Clara Valley Transportation Authority; GGBHTD = Golden Gate Bridge, Highway and Transportation District
*** Projected local, regional, state, and federal funds
Source: MTC

ALTHOUGH TRADE VOLUME THROUGH BAY AREA GATEWAYS HAS FALLEN…

Change in trade 1999-2003
Percent



	SFO airport	Port of Oakland	Port of Los Angeles	Port of Long Beach	LAX airport	JFK airport	Port of NY/NJ
Rank							
• 1999	6	16	4	3	8	1	5
• 2003	12	19	1	5	7	2	4
Primary cargo	Computers, semi-conductors, electronic equipment/ parts	Auto parts, iron, steel, wood, computer equipment	Furniture, apparel, electronic products	Machinery, electric equipment, motor vehicles, clothing	Vegetables, clothing, computer equipment	Apparel, machinery medical instruments foot wear	Beverages, vehicles, plastic

Source: Bureau of Transportation; McKinsey analysis

…THE BAY AREA IS THE 5TH LARGEST TRADE GATEWAY BY VALUE IN THE COUNTRY

	Total trade, 2003 $ Billions			**U.S. Total** Percent	**Comments**
Los Angeles	50	110	160	8.1	• Port of Los Angeles • Port of Long Beach • LAX airport
New York	27	87	114	5.7	• JFK airport • Port of NY/NJ • Newark airport
Detroit	55	47	102	5.1	• Port of Detroit
Laredo	32	46	78	4.0	• Port of Laredo
Bay Area	29	43	72	3.6	• SFO airport • Porf of Oakland

Source: Bureau of Transportation; McKinsey analysis

THE BAY AREA HAS THE THIRD HIGHEST AIRPORT PASSENGER TRAFFIC AMONG COMPARABLE REGIONS

Millions of passengers

	1995	2000	2004	CAGR 1995-2004 Percent
New York*	77.6	92.4	93.9	2.1
Los Angeles*	66.5	79.6	77.8	1.8
Bay Area*	55.0	65.1	57.4	0.5
Denver	31.1	38.8	42.4	3.5
Minneapolis	26.8	36.8	36.7	3.6
Seattle	22.8	28.4	28.8	2.6
Boston	24.3	27.4	26.1	0.8
Charlotte	20.9	23.1	25.5	2.2
San Diego	13.3	15.8	16.4	2.4
Research Triangle	6.1	10.6	8.6	3.9
Austin	5.3	7.9	7.2	3.4

* San Francisco includes SFO, San Jose and Oakland; New York includes Newark, JFK and La Guardia; Los Angeles includes LAX, Burbank, Long Beach, and Santa Ana

Source: Airports Council International

SAN FRANCISCO RANKS SIXTH IN THE COUNTRY IN INTERNATIONAL PASSENGER TRAFFIC

Total passengers* (Millions)		Rank
Atlanta	83.6	1
Chicago	75.5	2
Los Angeles	60.7	3
Dallas	59.4	4
Denver	42.4	5
San Francisco	32.2	13

Domestic passengers** (Millions)		Rank
Atlanta	77.0	1
Chicago	64.4	2
Dallas	54.3	3
Los Angeles	44.2	4
Denver	41.1	5
San Francisco	24.1	15

Cargo traffic (Metric tonnes)		Rank
Memphis	3.6	1
Anchorage	2.3	2
Los Angeles	1.9	3
Miami	1.8	4
Louisville	1.7	5
San Francisco	0.6	15

International passengers** (Millions)		Rank
New York	17.4	1
Los Angeles	16.5	2
Miami	14.0	3
Chicago	10.8	4
Newark	8.9	5
San Francisco	7.6	6

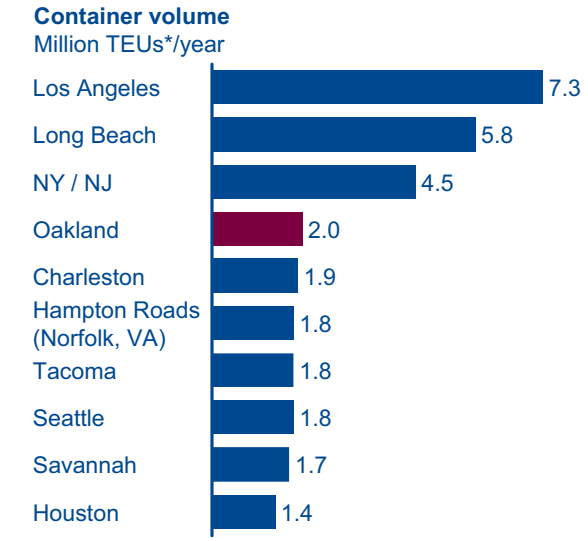
* Arriving and departing and transit

** Arriving and departing

Source: Airports Council International, 2004

THE PORT OF OAKLAND IS A KEY PLAYER IN THE BUSY PACIFIC COAST PORT SYSTEM

Top 10 Continental U.S. Ports – 2004



Major seaports and their cargo specialties

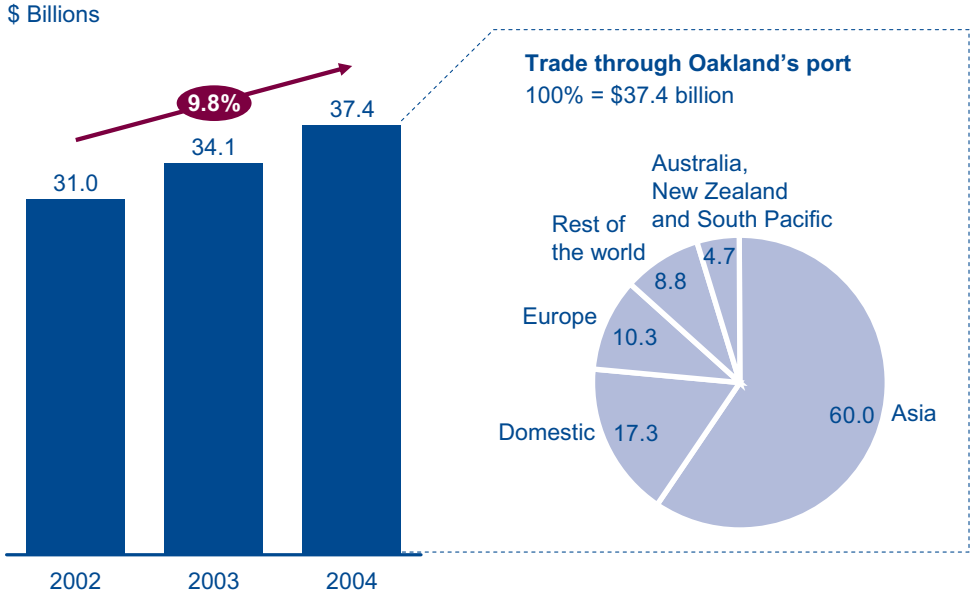
- Oakland (container cargo)
- San Francisco and Redwood City (construction materials)
- Richmond (gasoline and oil)

* TEU = 20-foot equivalent unit

Source: American Association of Port Authorities (AAPA)

ACTIVITY AT THE PORT OF OAKLAND HAS BEEN GROWING AT A ROBUST PACE OVER THE LAST 2 YEARS

$ Billions



Source: Bay Area Economic Forum report "International Trade and the Bay Area Economy"

Bay Area Economic Forum and Bay Area Economic Forum Foundation Board of Directors and Alternates

Chairman: Lenny Mendonca, Director, McKinsey & Company, Chairman, McKinsey Global Institute

Vice-Chair: Keith Carson, Board of Supervisors, Alameda County and Chairman, EDAB

Vice-Chair: John P. McCaffrey, Managing Partner, PricewaterhouseCoopers LLP

President & CEO: R. Sean Randolph, Ph.D.

Arthur Bienenstock, Ph.D., Vice Provost/Dean of Research & Graduate Policy, Stanford University

Robert J. Birgeneau, Ph.D., Chancellor, University of California, Berkeley

J. Michael Bishop, Ph.D., Chancellor, University of California, San Francisco

Thomas W. Bishop, Senior Vice President, URS Corporation

Mary G. F. Bitterman, Ph.D., President, The Bernard Osher Foundation

The Honorable Jerry Brown, Mayor, City of Oakland

The Honorable Valerie Brown, Supervisor, District 1, Sonoma County

Chip Conley, Chairman & CEO, Joie de Vivre Hospitality

The Honorable David Cortese, Councilmember, District 8, City of San Jose and President, Association of Bay Area Governments

Michael Covarrubias, Chairman & CEO, TMG Partners

Christopher DiGiorgio, Managing Partner, Accenture LLP

Deborah Edgerly, City Administrator, City of Oakland

Tom Epstein, Vice President, Public Affairs, Blue Shield of California

Charles (Chuck) Foster, C. Foster Consultant Service

Frederick T. Furlong, Ph.D., VP, Banking, Finance & Regional Studies, Federal Reserve Bank of San Francisco

Henry L. Gardner, Executive Director, Association of Bay Area Governments

Gina Glantz, Senior Advisor to the President, Service Employees International Union (SEIU)

The Honorable Ron Gonzales, Mayor, City of San Jose

Michael E. Hardeman, Business Representative, Painters & Allied Trades District Council 36

John Hennessy, Ph.D., President, Stanford University

David Hoyt, Group Executive Vice President, Wells Fargo

Mary Huss, Publisher, San Francisco Business Times

The Honorable Michael Kasperzak, Jr., Mayor, City of Mountain View

Daniel T. Keegan, Oshman Executive Director, San Jose Museum of Art

Regis B. Kelly, Ph.D., Executive Director, California Institute for Quantitative Biomedical Research (QB3) University of California, San Francisco

Rachel Krevans, Managing Partner, Morrison & Foerster

William L. Lee, Director of International, Economic and Tourism Development, City & County of San Francisco

Ted Lempert, President, Children Now

Peter A. Luchetti, CEO, GFP Advisors

The Honorable Cynthia Murray, Board of Supervisors, County of Marin

Michael Nacht, Ph.D., Dean, Goldman School of Public Policy, University of California, Berkeley

The Honorable Gavin Newsom, Mayor, City and County of San Francisco

Edward E. Penhoet, Ph.D., President, Gordon & Betty Moore Foundation

Sheryl Sandberg, Vice President, Global Online Sales & Operations, Google

George Scalise, President, Semiconductor Industry Association

The Honorable Robert Schroder, Mayor, City of Martinez

George Strait, Associate Vice Chancellor, Office of Public Affairs, University of California, Berkeley

A. Eugene Washington, M.D., M.Sc, Executive Vice Chancellor, University of California, San Francisco

Joyce M. Taylor, Senior Vice President, External Affairs-North, SBC California.

Jim Wunderman, President & CEO, Bay Area Council

Association of Bay Area Governments Executive Board

President: David D. Cortese, Councilmember, City of San Jose

Vice-President: Rose Jacobs Gibson, Supervisor, City of San Mateo

Immediate Past President: Scott Haggerty, Supervisor, County of Alameda

Executive Director: Henry L. Gardner

Representatives

Susan Adams, Supervisor, County of Marin

Maria Alegria, Councilmember, City of Pinole

Blanca Alvarado, Supervisor, County of San Mateo

Jane Brunner, Vice Mayor, City of Oakland

Todd Carlson, Mayor, City of Yountville

David D. Cortese, Councilmember, City of San Jose

Chris Daly, Supervisor, City & County of San Francisco

Mark Desaulnier, Supervisor, County of Contra Costa

Carole Dillon-Knutson, Mayor, City of Novato

Jose Esteves, Mayor City of Milpitas

Dan Furtado, Councilmember, City of Campbell

Rose Jacobs Gibson, Supervisor, County of Marin

John Gioia, Supervisor, County of Contra Costa

Mark Green, Mayor, City of Union City

Scott Haggerty, Supervisor, County of Alameda

Mike Kerns, Supervisor, County of Sonoma

Carol L. Klatt, Councilmember, City of San Mateo

Barbara Kondylis, Supervisor, County of San Solano

Linda J. Lezotte, Councilmember, City of San Jose

Fiona Ma, Supervisor, City & County of San Francisco

Peter Mchugh, Supervisor, County of San Mateo

Ross Mirkarimi, Supervisor, City & County of San Francisco

Nancy Nadel, Councilmember, City of Oakland

Gavin Newsom, Mayor, City of San Francisco

Julian Potter, Director of Public Policy, City of San Francisco

Jean Quan, Councilmember, City of Oakland

Steve Rabinowitsh, Councilmember, City of Santa Rosa

Gwen Regalia, Councilmember, City of Walnut Creek

James P. Spering, Mayor, City of Suisun

Gail Steele, Supervisor, County of Alameda

Adrienne Tissier, Supervisor, County of Marin

Ken Yeager, Councilmember, City of San Jose

Shelia Young, Mayor, City of San Leandro

Alternates

Amiee Albertson, Office of The Mayor, City & County of San Francisco

Andrew Alexander, Mayor, County of Napa (Calistoga)

Ruth Atkin, Councilmember, County of Alameda (Emeryville)

Nora Campos, Councilmember, City of San Jose

Mark Church, Supervisor, County of San Mateo

Paul Cohen, Councilmember, County of Marin (San Rafael)

Bill Dodd, Supervisor, County of Napa

Mike Farrah, Senior Advisor To The Mayor, City & County of San Francisco

Donald Gage, Supervisor, County of Santa Clara

Federal Glover, Supervisor, County of Contra Costa

Anthony Intintoli, Jr., Mayor, County of Solano

Paul Kelley, Supervisor, County of Sonoma

Stephen Kinsey, Supervisor, County of Marin

Norman Kline, Vice Mayor, County of Santa Clara (Saratoga)

Liz Kniss, Supervisor, County of Santa Clara

Patrick Kwok, Mayor, County of Santa Clara (Cupertino)

Alice Lai-bitker, Supervisor, County of Alameda

Janet Lockhart, Mayor, County of Alameda (Dublin)

Gregg Manning, Mayor, County of Contra Costa (Clayton)

John Marquez, Councilmember, County of Contra Costa (Richmond)

Nathan Miley, Supervisor, County of Alameda

Nancy Pyle, Councilmember, City of San Jose

Sepi A. Richardson, Mayor, County of San Mateo (Brisbane)

John Silva, Supervisor, County of Solano

Bay Area Council Executive Committee

Chairman: Alexander R. Mehran, President & CEO, Sunset Development Company

Secretary: Lenny Mendonca, Director , McKinsey & Company

Treasurer: David A. Hoyt, Senior Executive Vice President of Wholesale Banking, Wells Fargo & Company

Andrew Ball, President & CEO, Webcor Builders

Mary Cranston, Chair, Pillsbury Winthrop Shaw Pittman LLP

Lloyd H. Dean, President & CEO, Catholic Healthcare West

George C. Halvorson, Chairman & CEO, Kaiser Foundation Health Plan, Inc.

W. Roger Haughton, Chairman & CEO, The PMI Group, Inc.

Gerald E. Johnston, Chairman & Chief Executive Officer, The Clorox Company

Thomas B. King, President & CEO, Pacific Gas and Electric Company

Phillip L. Luecht, Jr., Chairman, Marsh Industry Practices, Marsh Risk & Insurance Services

Peter A. Magowan, President & Managing General Partner, San Francisco Giants

Philip Marineau, President & CEO, Levi Strauss & Co.

Duncan L. Matteson, Chairman, Greater Bay Bank

Claire McAuliffe, Principal, Hodge Niederer Cariani

P. Anthony Ridder, Chairman & CEO, Knight Ridder

Nelson C. Rising, Director, ProLogis

T. Gary Rogers, Chairman & CEO, Dreyer's Grand Ice Cream

Karl Schroeder, President, Northern California Division, Safeway Inc.

Douglas W. Shorenstein, Chairman & CEO, Shorenstein Company LLC

Steven J. Silvestri, Market President, Bank of America

Ex Officio

Jim Wunderman, President & CEO, Bay Area Council

For additional copies of this report, please contact:

Bay Area Economic Forum
200 Pine Sreet, Suite 300
San Francisco, CA 94104
Tel: 415-981-7117
Fax: 415-981-6408
E-mail: info@bayeconfor.org
Web: www.bayeconfor.org

BAY AREA COUNCIL

Bay Area Council
200 Pine Sreet, Suite 300
San Francisco, CA 94104
Tel: 415-981-6600
Fax: 415-981-6408
E-mail: info@bayareacouncil.org
Web: www.bayareacouncil.org

BAY AREA ECONOMIC FORUM
A Partnership of the Association of Bay Area Governments and the Bay Area Council

Bay Area Economic Forum
200 Pine Sreet, Suite 300
San Francisco, CA 94104
Tel: 415-981-7117
Fax: 415-981-6408
E-mail: info@bayeconfor.org
Web: www.bayeconfor.org

ABAG ASSOCIATION OF BAY AREA GOVERNMENTS

Association of Bay Area Governments
Joseph P. Bort MetroCenter
101 8th Street, Oakland, CA
Mailing Address:
P.O. Box 2050
Oakland, CA 94604-2050
Tel: 510-464-7900
Fax: 510-464-7970
E-mail: info@abag.ca,.gov
Web: www.abag.ca.gov